

UNCLASSIFIED

AD NUMBER

AD802114

LIMITATION CHANGES

TO:

Approved for public release; distribution is unlimited. Document partially illegible.

FROM:

Distribution authorized to U.S. Gov't. agencies and their contractors; Critical Technology; JUL 1966. Other requests shall be referred to Air Force Flight Dynamics Laboratory, FDTR, Wright-Patterson AFB, OH 45433. Document partially illegible. This document contains export-controlled technical data.

AUTHORITY

affdc ltr, 31 may 1973

THIS PAGE IS UNCLASSIFIED

AFFDL TR-66-57

VOLUME ■ I

**KC-135 POWER SPECTRAL
VERTICAL GUST LOAD
ANALYSIS**

SUPPLEMENT RESULTS VOLUME II

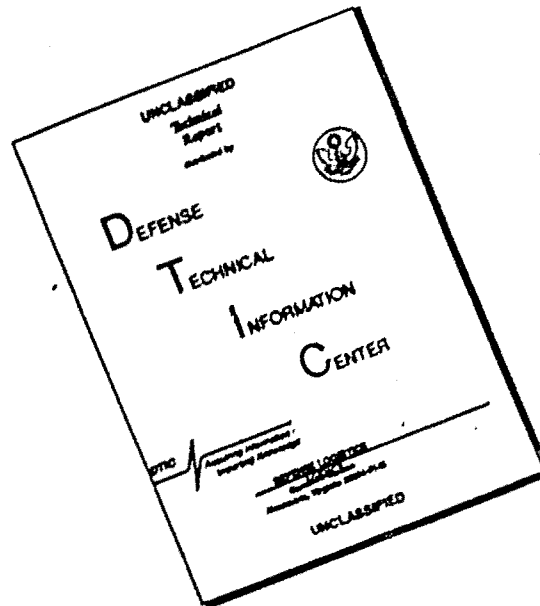
*ROBERT N. LATZ
THE BOEING COMPANY*

**TECHNICAL REPORT AFFDL-TR-66-57, VOLUME II
JULY, 1966**

This document is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with prior approval of the Air Force Flight Dynamics Laboratory (FDTR), Wright-Patterson AFB, Ohio 45433.

**AIR FORCE FLIGHT DYNAMICS LABORATORY
RESEARCH AND TECHNOLOGY DIVISION
AIR FORCE SYSTEMS COMMAND
WRIGHT-PATTERSON AIR FORCE BASE, OHIO**

DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

NOTICES

When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

Copies of this report should not be returned to the Research and Technology Division unless return is required by security considerations, contractual obligations, or notice on a specific document.

AFFDL TR-66-57

VOLUME **I**

**KC-135 POWER SPECTRAL
VERTICAL GUST LOAD
ANALYSIS**

SUPPLEMENT RESULTS VOLUME II

**ROBERT N. LATZ
THE BOEING COMPANY**

This document is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with prior approval of the Air Force Flight Dynamics Laboratory (FDTR), Wright-Patterson AFB, Ohio 45433.

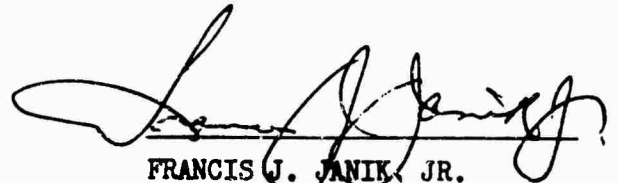
FOREWORD

The program described in this report was conducted by the Structural Dynamics Unit, Structures Staff, Commercial Airplane Division, The Boeing Company, Renton, Washington. The program was monitored by Mr. Paul Hasty (FDTR), Air Force Flight Dynamics Laboratory, Research and Technology Division, Air Force Systems Command, Wright-Patterson Air Force Base, Ohio, under contract number AF33(615)-2454, "Investigation to Obtain Specific Design Calculations on Proven Transport Aircraft for the Verification of a Gust Design Procedure Based on Proven Spectral Techniques." The program was accomplished under system number 5(611367 62405334), project number 1367, "Structural Design Criteria", task number 136702, "Aerospace Vehicle Structural Loads Criteria." The time period covered by this final technical report is 1 July 1965 to 1 June 1966. The manuscript was released by the author on 1 April 1966 for publication as an RTD technical report.

Supervising consultant was Dr. John C. Houbolt of Aeronautical Research Associates of Princeton. Robert N. Latz conducted the analysis under the supervision of Arthur J. Kamm, Supervisor of the Structural Dynamics Unit.

This report has been given The Boeing Company document number D6-18252.

This technical report has been reviewed and is approved.



FRANCIS J. JANIK, JR.
Chief, Theoretical Mechanics Branch
Structures Division

ABSTRACT

This report presents the results of an analysis to obtain the stress response parameters (level of stress per level of turbulence) and zero-crossing rates at two wing stations and two body stations of the KC-135 airplane where the margins of safety for gusts are minimum. Five combinations of gross weight, speed, and altitude were selected. The results of the computer analysis present the effects of changes in scale of turbulence and upper cutoff frequency on the response parameters and zero-crossing rates. Results indicate a large reduction in stress response parameter and small reduction in zero-crossing rate with increasing scale of turbulence. Variations of upper cutoff frequency above the highest modal frequency used in the analysis indicate negligible change in either stress response parameter or zero-crossing rate. The ratios of incremental limit allowable stress to stress response parameter obtained over a wide range of gross weight, speed, and scale of turbulence result in a minimum value of 53. This document (volume I) presents the analyses and specific results described above. Volume II presents response parameters, zero-crossing rates, frequency response functions, and power spectra of bending moment, shear, and torsion.

CONTENTS

<u>Section</u>	<u>Page</u>
I INTRODUCTION	1
II ANALYSIS	2
1. Analysis Conditions	2
2. Airplane Representation	4
a. Weights Data	4
b. Stiffness Data	6
c. Structural Damping Data	6
d. Aerodynamic Data	6
3. Atmospheric Turbulence Representation	7
4. Equations of Motion	7
III RESULTS AND DISCUSSION	11
IV CONCLUSIONS	29
APPENDIX I WEIGHT DATA	31
APPENDIX II STIFFNESS DATA	39
APPENDIX III AERODYNAMIC DATA	45
APPENDIX IV AIRPLANE FREE-FREE MODE SHAPES	51
APPENDIX V STRESS FREQUENCY RESPONSE FUNCTIONS	67
APPENDIX VI STRESS RESPONSE PARAMETERS AND ZERO-CROSSING RATES	109
APPENDIX VII INCREMENTAL LIMIT ALLOWABLE STRESSES	115
APPENDIX VIII CORRELATION COEFFICIENTS BETWEEN AXIAL AND SHEAR STRESSES	117
APPENDIX IX STRESS INFLUENCE COEFFICIENTS	119
REFERENCES	121

ILLUSTRATIONS

<u>Figure</u>	<u>Title</u>	<u>Page</u>
1	Speed-Altitude Conditions	3
2	Gross Weight Conditions Relative to Operational Center-of-Gravity Limits	5
3	Analytical Representation of Atmospheric Spectra	8
4	Comparison of Steady-State, Static, Elastic Solution with Aeroelastic Solution (Analysis Condition 1)	16
5	Locations at Which Stresses Are Obtained	12
6	Segment Locations and Typical Distributions of Margins of Safety	13
7	Response Parameters and Zero-Crossing Rates for Shear Stress	14
8	Response Parameters and Zero-Crossing Rates for Axial Stress	17
9	Zero-Crossing Rates Versus $\sigma_W \eta_D$ (Linear Plot)	21
10	Zero-Crossing Rates Versus $\sigma_W \eta_D$ (Semilog Plot)	24
11	Stress Interaction Diagram	27
12	Wing Vertical-Bending and Torsion Stiffness	39
13	Wing Elastic-Axis Location	40
14	Body Vertical-Bending Section Moment of Inertia	41
15	Body Elastic-Axis Location	42
16	Wing Lift Distribution	45
17	Local Center-of-Pressure Location	46
18	Body Lift Distribution (Mach 0.85)	47
19	Body Lift Distribution (Mach 0.50)	48
20	Wing Vertical Displacement in the Normalized Free-Free Airplane Modes; 297,000-Pound Gross Weight (Weight Condition A)	51
21	Wing Torsional Displacement in the Normalized Free-Free Airplane Modes; 297,000-Pound Gross Weight (Weight Condition A)	52
22	Body Vertical Displacement in the Normalized Free-Free Airplane Modes; 297,000-Pound Gross Weight (Weight Condition A)	53
23	Wing Vertical Displacement in the Normalized Free-Free Airplane Modes; 268,000-Pound Gross Weight (Weight Condition B)	55
24	Wing Torsional Displacement in the Normalized Free-Free Airplane Modes; 268,000-Pound Gross Weight (Weight Condition B)	56
25	Body Vertical Displacement in the Normalized Free-Free Airplane Modes; 268,000-Pound Gross Weight (Weight Condition B)	57
26	Wing Vertical Displacement in the Normalized Free-Free Airplane Modes; 190,590-Pound Gross Weight (Weight Condition C)	59

ILLUSTRATIONS (Continued)

<u>Figure</u>	<u>Title</u>	<u>Page</u>
27	Wing Torsional Displacement in the Normalized Free-Free Airplane Modes; 190,590-Pound Gross Weight (Weight Condition C)	60
28	Body Vertical Displacement in the Normalized Free-Free Airplane Modes; 190,590-Pound Gross Weight (Weight Condition C)	61
29	Wing Vertical Displacement in the Normalized Free-Free Airplane Modes; 107,260-Pound Gross Weight (Weight Condition D)	63
30	Wing Torsional Displacement in the Normalized Free-Free Airplane Modes; 107,260-Pound Gross Weight (Weight Condition D)	64
31	Body Vertical Displacement in the Normalized Free-Free Airplane Modes; 107,260-Pound Gross Weight (Weight Condition D)	65

TABLES

<u>Number</u>	<u>Title</u>	<u>Page</u>
I	Summary of Analysis Conditions	2
II	Summary of Weight Conditions	4
III	Margins of Safety	11
IV	Weight Condition A (Maximum Zero Flap Weight; Gross Weight: 297,000 Pounds)	31
V	Weight Condition B (Maximum Transfer Weight; Gross Weight: 268,000 Pounds)	33
VI	Weight Condition C (Intermediate Gross Weight with Structural Reserve Fuel; Gross Weight: 190,590 Pounds) . . .	35
VII	Weight Condition D (Operating Weight Empty with Structural Reserve Fuel; Gross Weight: 107,260 Pounds) . . .	37
VIII	Nacelle Cantilever Mode Shapes and Frequencies	43
IX	Rigid-Airplane Derivatives (1/Radian)	49
X	Rigid-Horizontal-Stabilizer Lift at 24,000-Foot Altitude	49
XI	Nacelle Mode Shapes (Weight Condition A)	54
XII	Nacelle Mode Shapes (Weight Condition B)	58
XIII	Nacelle Mode Shapes (Weight Condition C)	62
XIV	Nacelle Mode Shapes (Weight Condition D)	66
XV	Stress Frequency Response Functions (Analysis Condition 1)	67
XVI	Stress Frequency Response Functions (Analysis Condition 2)	85
XVII	Stress Frequency Response Functions (Analysis Condition 3)	91
XVIII	Stress Frequency Response Functions (Analysis Condition 4)	97
XIX	Stress Frequency Response Functions (Analysis Condition 5)	103
XX	Stress Response Parameters and Zero-Crossing Rates (Analysis Condition 1)	109
XXI	Stress Response Parameters and Zero-Crossing Rates (Analysis Condition 2)	111
XXII	Stress Response Parameters and Zero-Crossing Rates (Analysis Condition 3)	112
XXIII	Stress Response Parameters and Zero-Crossing Rates (Analysis Condition 4)	113
XXIV	Stress Response Parameters and Zero-Crossing Rates (Analysis Condition 5)	114
XXV	Incremental Limit Allowable Stresses	115
XXVI	Correlation Coefficients Between Axial and Shear Stresses	117

ABBREVIATIONS AND SYMBOLS

A	stress response parameter (rms value of incremental stress for a 1 fps rms random gust) (psi/fps)
N_0	zero-crossing rate (average number of times per second that the incremental stress crosses the 1g mean value with positive slope)
ω	frequency (radians per second)
$ H(\omega) $	absolute value of frequency response function
$\Phi_1(\omega)$	gust spectrum
ω_c	upper cutoff frequency (radians per second)
Ω	reduced frequency (radians per foot)
L	scale of turbulence (feet)
σ	rms level of turbulence intensity (fps)
σ_{W^1D}	measure (fps) of the probability of exceeding limit stress. (It is equal to the ratio of incremental limit allowable stress to stress response parameter.)

SECTION I

INTRODUCTION

A program is being conducted by the U. S. Air Force to establish a simplified procedure to design airplanes for gusts based on power spectral density techniques. To verify the proposed gust procedure, specific design calculations for selected airplanes were obtained from several airplane manufacturers. The Boeing Company was selected to obtain design calculation for the KC-135 airplane and these design calculations are presented in this report.

The specific design calculations presented are stress response parameters (ratio of rms level of stress to rms level of turbulence), zero-crossing rates, and stress frequency response functions. These data are calculated at two wing stations and two body stations where the margins of safety for gusts are minimum. The free-free mode shapes of the airplane are also included.

In volume II are presented response parameters, zero-crossing rates, frequency response functions, and power spectra of bending moment, shear, and torsion.

SECTION II

ANALYSIS

1. Analysis Conditions:

a. The selection of flight conditions for analysis is based on two considerations. First, consideration is given to the gust design conditions used in the basic design of the KC-135 airplane (1). These are based on the use of the gust load formula (2). Second, consideration is given to the flight conditions that would result in minimum pitch stability, that contributes to high loads in random turbulence. The critical gust altitude of 24,000 feet was derived from the design gust analysis, and this altitude is selected for the present analysis. Past power-spectral analyses have shown that low pitch stability results in high loads. The conditions for low pitch stability are a high lift coefficient and an aft center of gravity. Since both of these conditions cannot be achieved simultaneously on the KC-135 airplane, five analysis conditions are selected to represent a wide range of gross weight, center of gravity, and speed.

b. Table I and figure 1 summarize the analysis conditions. Condition 1 is the maximum gross weight, maximum design speed condition and represents the maximum gust force input to the airplane. Using the gust load formula (2), this is the critical gust design condition for the inboard wing. It should be noted that the basic KC-135 wing is designed by maneuver rather than gust conditions. Analysis condition 2 represents a fuel transfer weight of the airplane. Analysis condition 3 represents the airplane with a full body and an empty wing, except for structural reserve fuel. Analysis condition 4 represents the operating-weight-empty airplane plus structural reserve fuel (the condition having the most-aft center of gravity). Analysis condition 5 represents the maximum-gross-weight airplane flying at the slowdown speed for severe gust. At this flight condition, the airplane is flying at maximum lift coefficient.

Table I. Summary of Analysis Conditions

Analysis condition number	Weight condition	Gross weight (lb)	Altitude (ft)	Equivalent airspeed (kn)	Mach number	Body fuel (lb)	Wing fuel (lb)
1	A	297,000	24,000	350	0.85	83,328	109,512
2	B	268,000	24,000	350	0.85	87,927	75,913
3	C	190,590	24,000	350	0.85	83,323	3,100
4	D	107,260	24,000	350	0.85	0	3,100
5	A	297,000	24,000	207	0.50	83,328	109,512

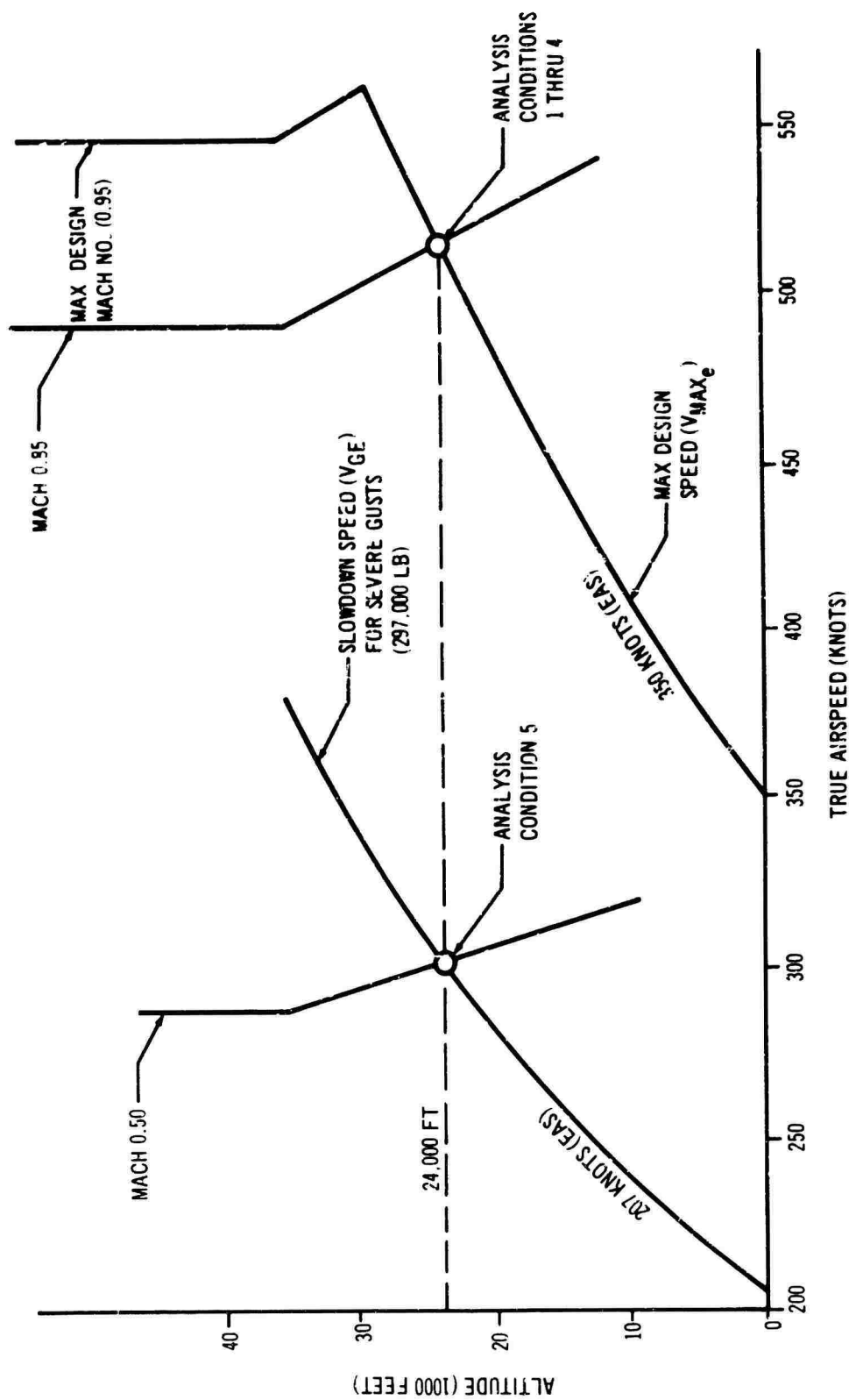


Figure 1. Speed-Altitude Conditions

2. **Airplane Representation.** The airplane used in this analysis is the KC-135. The airplane has a crew of four: pilot, copilot, navigator, and boom operator. It normally cruises at altitudes from 25,000 to 45,000 feet, gross weights to 297,000 pounds, and speeds to 525 knots (true air speed). The airplane has a wing span of 131 feet and an overall length of 136 feet. A two-view diagram is shown in figure 5, page 12. All major parts of the airplane except the fin and horizontal stabilizer are considered to be elastic in the analysis. Therefore, a rather comprehensive mass and stiffness description of the airplane is required. Simple beam-bending theory is used to represent the stiffness characteristics of the major components of the structure, such as the wing and forward and aft fuselage. The elastic axes are located approximately along the locus of shear centers of each component, except in the inboard portion of the wing where the elastic axis is determined from static tests.

a. **Weights Data:**

(1) The complete detailed description of panel weights (obtained from reference 3) used in this analysis is given in appendix I. The fuselage is divided into 18 weight panels and the panel weight and pitch inertia is determined for each panel. The wing semispan is divided into ten spanwise panels. Each of these panels are divided into five zones: leading edge, front spar, interspar, rear spar, and trailing edge. The weight and center of gravity are calculated for each zone and summed to give the total panel weight and center of gravity. The total panel-weight moments of inertia are computed by rotation and transfer of zone results into axes located parallel and perpendicular to the wing elastic axis.

(2) The mass properties for each engine, nacelle, and nacelle strut are combined and a lumped center of gravity is determined. Then, the nacelle mass moments of inertia are determined for axes located perpendicular and parallel to the airplane reference axis.

(3) Table II summarizes the weight conditions shown on the gross-weight-versus-center-of-gravity chart in figure 2.

Table II. Summary of Weight Conditions

Weight condition	Gross weight (lb)	CG (percent mac)	Fuel (lb)						
			Wing				Body		
			Outboard mains 1 & 4	Inboard mains 2 & 3	Center section	Outboard reserves	Forward	Aft	Upper
A	297,000	21.4	26,806	29,575	47,489	5,642	37,700	41,457	4,171
B	268,000	23.0	14,212	14,212	47,489	---	37,700	41,457	8,770
C	190,590	28.3	1,550	1,550	---	---	37,700	41,457	4,173
D	107,260	35.1	1,550	1,550	---	---	---	---	---
Capacity of tanks			26,806	29,575	47,489	5,642	37,700	41,457	14,131

Note: Fuel density at 6.5 pounds per gallon

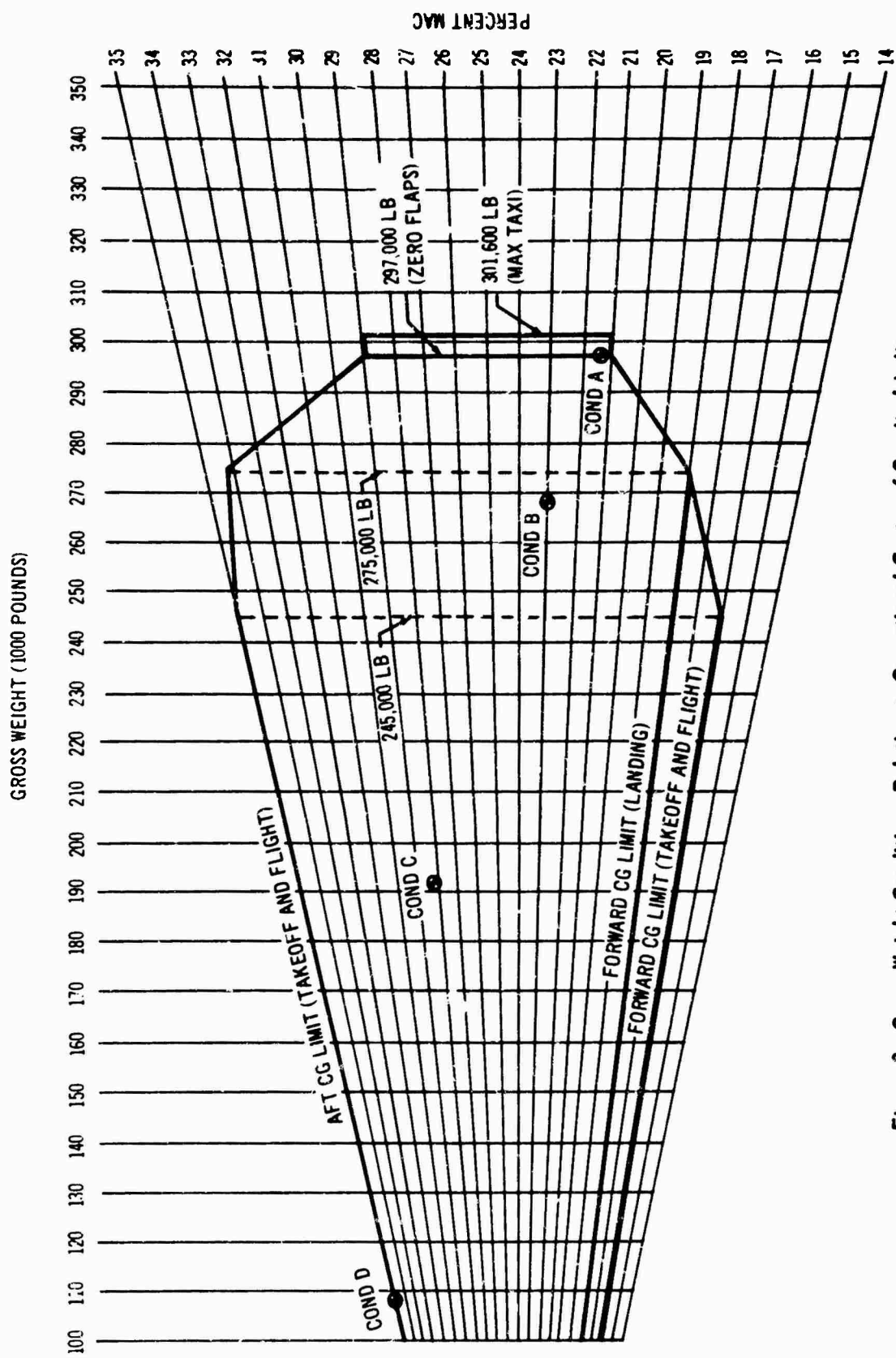


Figure 2. Gross Weight Conditions Relative to Operational Center-of-Gravity Limits

b. Stiffness Data:

(1) The stiffness of each major component of the airplane (except nacelle struts) is described by a distribution of bending stiffness (EI) and torsional stiffness (GJ) along the elastic axis. The wing-section properties are computed using front and rear spar areas and all in-spar skin for both upper and lower surfaces. Values for modulus and shear modulus of elasticity (E and G) are 10.3×10^6 and 3.8×10^6 psi, respectively. The body-section properties are computed using stiffeners with full-skin effective in tension and a portion of skin effective in compression. The body cutout sections are analyzed individually by special analysis. The body center-section stiffness is estimated on the basis of variation of skin thickness, keel beam stiffness, and stringer size from body stations 620 through 820. The body stiffness is for the 2g dive maneuver condition (tension in the upper surface).

(2) The stiffness of the nacelle struts is calculated from the inertia of the nacelle-strut combination and the natural frequency and mode shapes obtained from ground shake tests (4, 5). The detailed stiffness data is given in appendix II.

c. Structural Damping Data:

(1) The structural damping used in this analysis is obtained from the ground vibration test of the 707-320B airplane. These values of damping are considered to be representative of the KC-135 airplane, since the structure of the two airplanes is similar. The values of structural damping coefficient are equal to twice the fraction of critical damping.

<u>Mode</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>
Structural damping coefficient	0.015	0.045	0.053	0.030	0.025	0.033	0.029	0.028

d. Aerodynamic Data:

(1) All of the basic aerodynamic data required for these analyses are obtained from a series of wind tunnel tests (6). Wind tunnel pressure-model test results are used to establish wing- and fuselage-airload distribution. The aerodynamic coefficients are corrected for model flexibility before they are used for full-scale airplane analysis, and are later refined to obtain final agreement between the aeroelastic analysis and actual airplane flight-load survey measurements.

(2) The unsteady aerodynamics are based on two-dimensional strip theory, based on wind tunnel model-pressure data, and are modified to include aerodynamic induction effects (7). These induction effects account for the aerodynamic pressure carryover between wing panels and between the wing and horizontal tail. This is accomplished by using a downwash matrix based on lifting-line theory. The dynamic downwash matrix includes pressure-carryover and pressure-transmittal functions to provide the proper magnitude and phasing of the carryover pressure. The section (or strip) aerodynamics for zero frequency are made to agree with the comparable aeroelastic solution. Included in the aerodynamics is the effect of gradual penetration into the gust.

(3) Body lift distribution is based on wind tunnel pressure-model data adjusted to make the rigid airplane pitch and lift derivatives match those used in the aeroelastic analysis. Detailed aerodynamic data are given in appendix III. The maximum lift correction due to compressibility occurs at mach 0.85.

3. Atmospheric Turbulence Representation:

a. There are two power spectra that are in current use to represent the atmosphere (8), and the following spectrum was selected by Dr. Houbolt for this analysis:

$$\Phi(\Omega) = \left(\frac{\sigma^2 L}{\pi} \right) \frac{1 + \frac{8}{3} (1.339 L \Omega)^2}{[1 + (1.339 L \Omega)^2]^{11/6}}$$

This power spectrum is plotted in figure 3 for scales of turbulence of 1,000, 3,000, and 5,000 feet. A value of 1 fps was used throughout the analysis for σ .

b. It is assumed that the turbulence is essentially "frozen" in space and is uniform normal to the line of flight of the airplane. The airplane passes over the turbulence much as an automobile would travel over a rough road. This approach assumes that the spanwise variation of turbulence (except for the effect of gradual penetration) is negligible.

4. Equations of Motion:

a. The airplane is represented by ten degrees of freedom: eight symmetrical free-free elastic modes, which are plotted in appendix IV, and rigid-airplane vertical translation and pitch. All flight control surfaces are assumed fixed in the 1g flight position. The response functions and zero-crossing rates are calculated from the following equations:

$$A = \int_0^{\omega_c} |H(\omega)|^2 \Phi_i(\omega) d\omega$$

$$N_o = \frac{1}{2\pi} \left[\frac{\int_0^{\omega_c} \omega^2 |H(\omega)|^2 \Phi_i(\omega) d\omega}{\int_0^{\omega_c} |H(\omega)|^2 \Phi_i(\omega) d\omega} \right]^{1/2}$$

b. To check the equations of motion, the loads are obtained from the equations of motion for a 1g gust condition and compared with those obtained from the aeroelastic solution. This is accomplished by first obtaining the

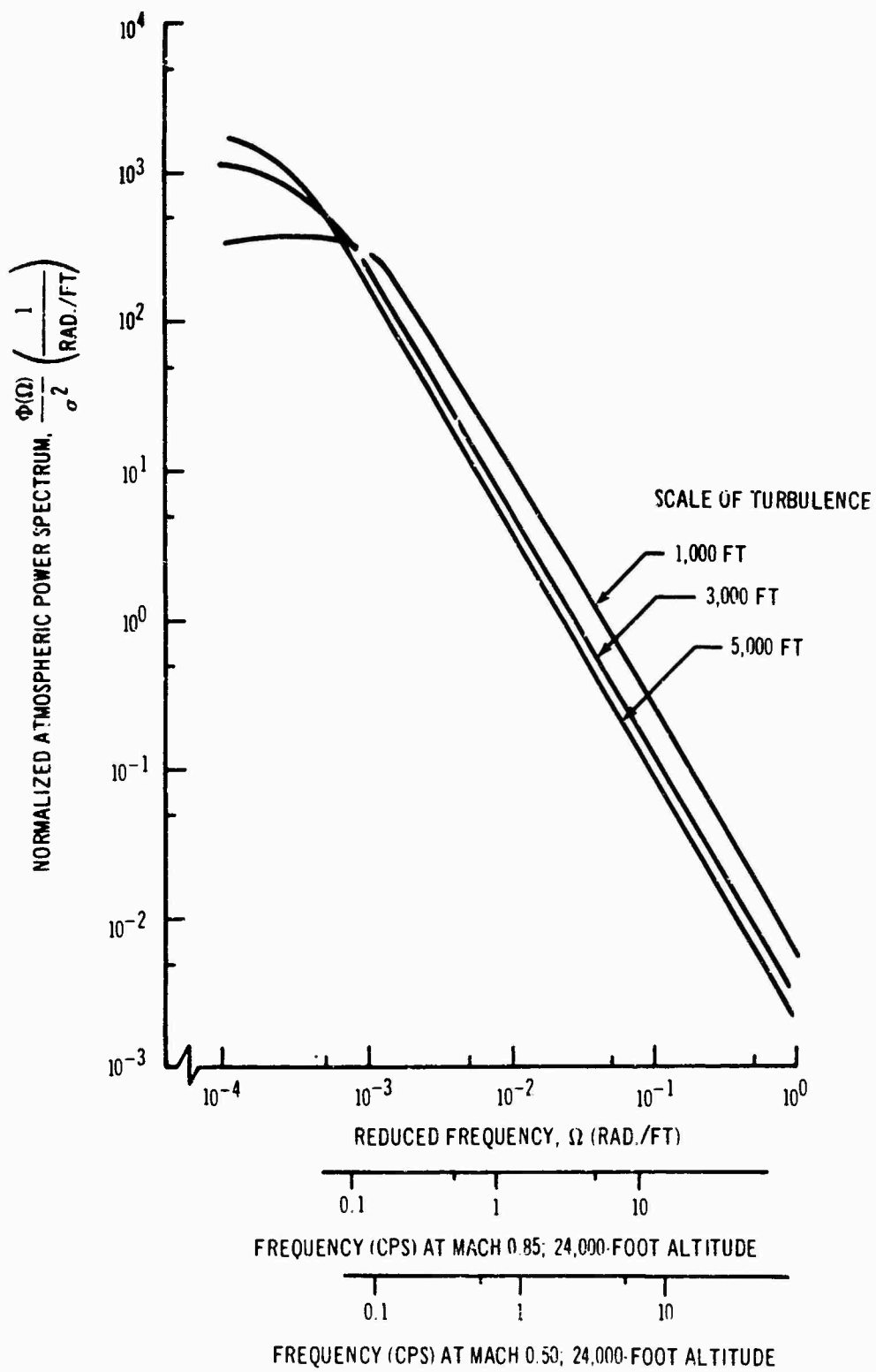
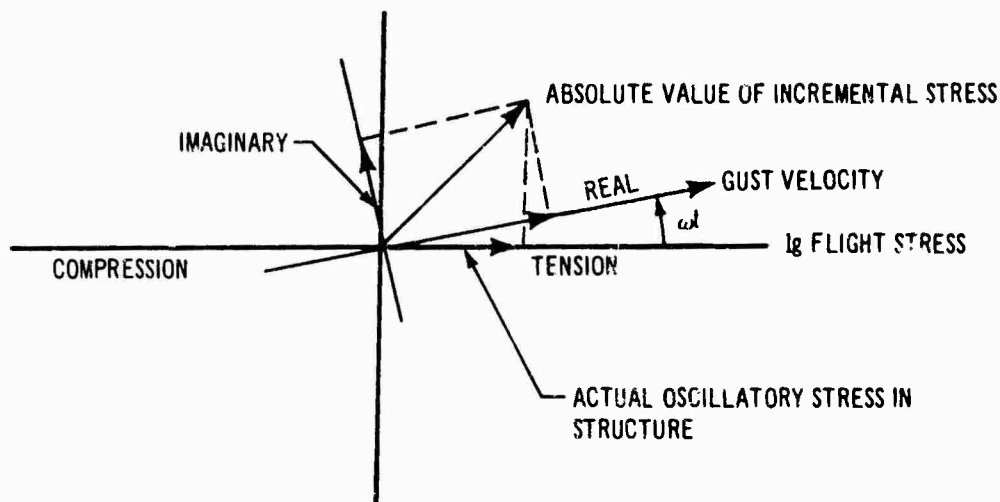


Figure 3. Analytical Representation of Atmospheric Spectra

equations of motion for zero-frequency gust input. Then the pitch- and elastic-mode generalized coordinate accelerations, the pitch and translation displacement, and all of the generalized coordinate velocities are equated to zero. The vertical translation acceleration is equated to $1g$. To allow for an airplane moment balance, a tail load is added to the equations as an additional unknown. This tail load represents the change in tail lift required to balance the airplane while the airplane is flying through a gust that gives it a $1g$ acceleration. The solution of these equations gives the elastic mode deflections, the gust angle required for $1g$ acceleration, and the tail load required to balance the airplane. A comparison of wing loads is shown in figure 4 for analysis condition 1 (table 1).

c. The stress frequency response functions for the airplane structure are obtained from the complex frequency responses of the generalized coordinates. Shear, moment, and torsion coefficients are calculated for unit deflections of the generalized coordinates. These coefficients are multiplied by the complex frequency responses of the generalized coordinates to obtain load frequency responses. The load frequency responses are multiplied by stress influence coefficients obtained from the airplane stress analysis to give the complex stress frequency response functions. The absolute value of these stress frequency-response functions is then used to obtain A and N_0 . The stress frequency-response functions are given in complex form, and represent the incremental stress relative to the gust velocity and $1g$ mean as shown below.



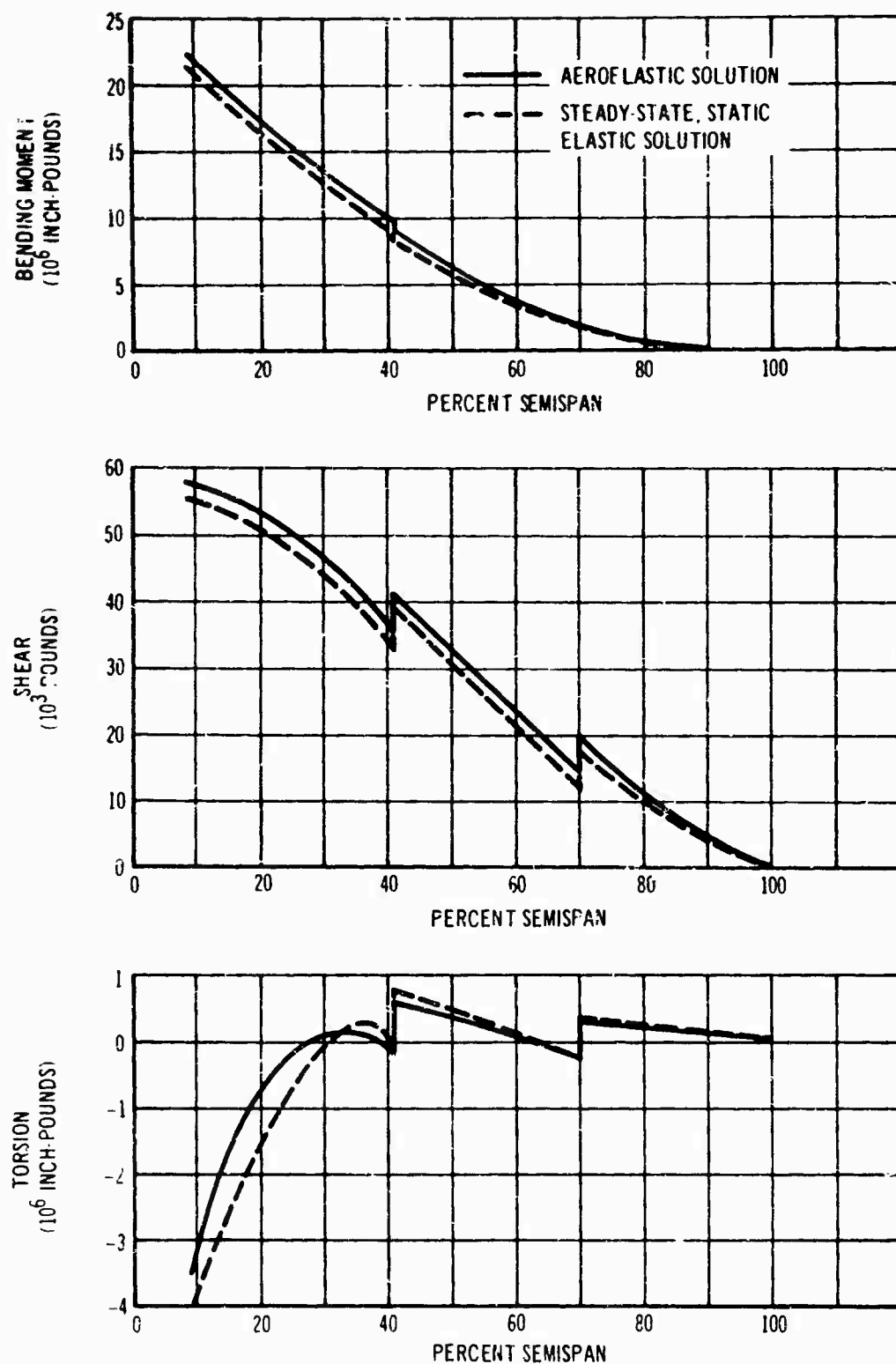


Figure 4. Comparison of Steady-State, Static, Elastic Solution with Aeroelastic Solution (Analysis Condition 1)

SECTION III

RESULTS AND DISCUSSION

Loads are obtained at two wing stations and two body stations where the gust margins are minimum. The margins of safety shown in table III are calculated using the gust load formula (2).

The wing and aft body are designed by maneuver conditions. The forward body is designed by braked-roll and pressurization conditions. However, for flight conditions, the margin of safety for gust for the forward body (which includes alleviation due to pitch) is less than for maneuver conditions. The fuselage and wing margins of safety are given in references 9 and 10, respectively.

Table III. Margins of Safety

Location	Segment number	Type of loading	Gust margins of safety
WING			
27 percent semispan	10	Combined	0.20
27 percent semispan	14	Primarily tension	0.39
40.06 percent semispan (inboard of nacelle)	8	Combined	0.24
40.06 percent semispan (inboard of nacelle)	107	Combined	0.20
BODY			
Body balance station 540	S-17	Clear load only	0.20
Body balance station 820	S-1	Tension load only	0.14

Figures 5 and 6 show these locations on the airplane. The curves of margin of safety in figure 6 are included to show the variation along the cross section of the wing. The margins of safety are based on the following equation:

$$\text{Margin of safety} = \frac{\text{Allowable ultimate principal stress}}{\text{Design ultimate principal stress}} - 1$$

The results of this investigation are response parameters A , zero-crossing rates N_0 , stress transfer functions, and the ratios of incremental limit allowable stress to stress response parameter. The stress frequency-response functions are tabulated in appendix V.

The effects of variations in scale of turbulence on response parameters A and zero-crossing rates N_0 are shown in figures 7 and 8. The stress response parameters and zero-crossing rates are tabulated for each analysis

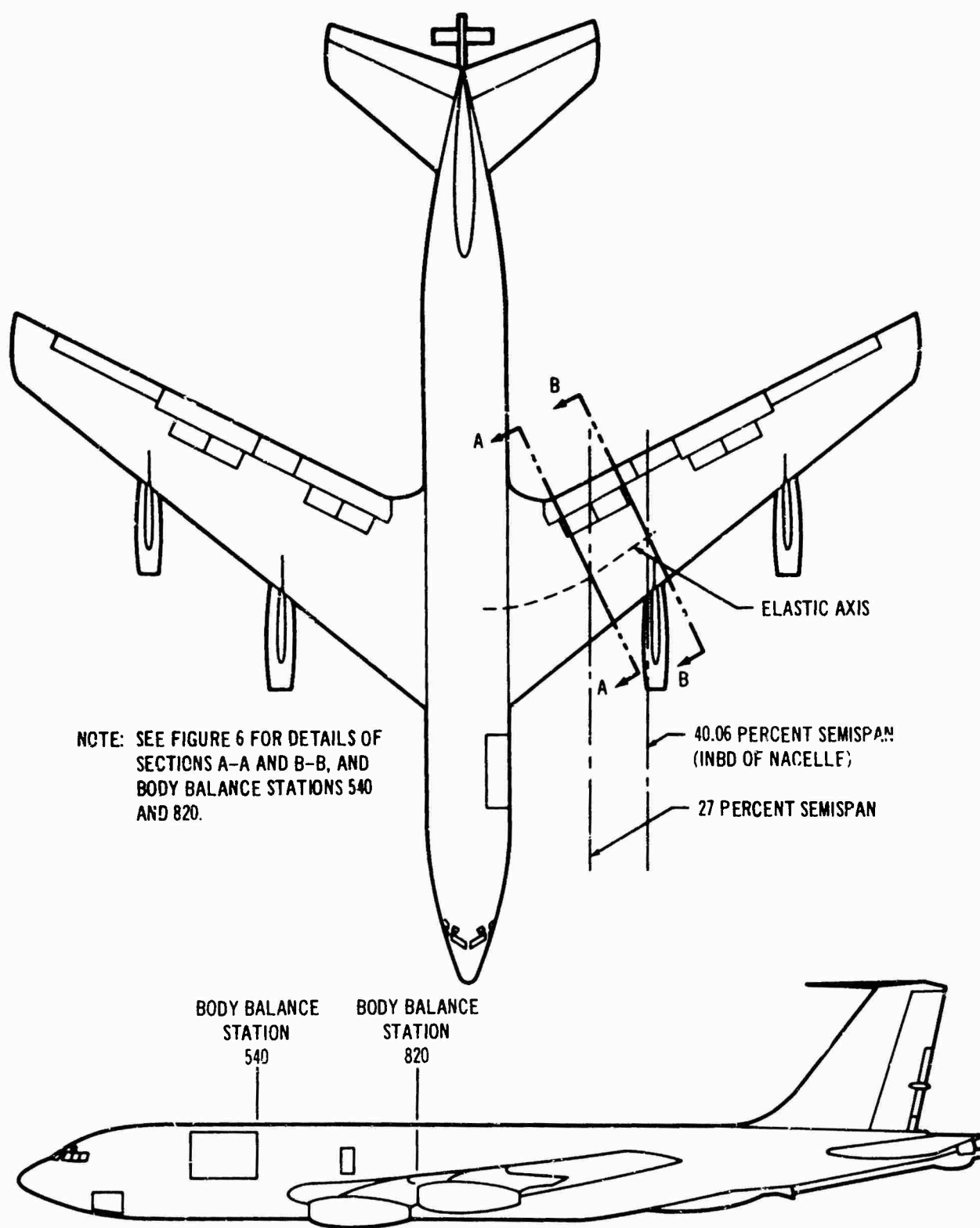


Figure 5. Locations at Which Stresses Are Obtained

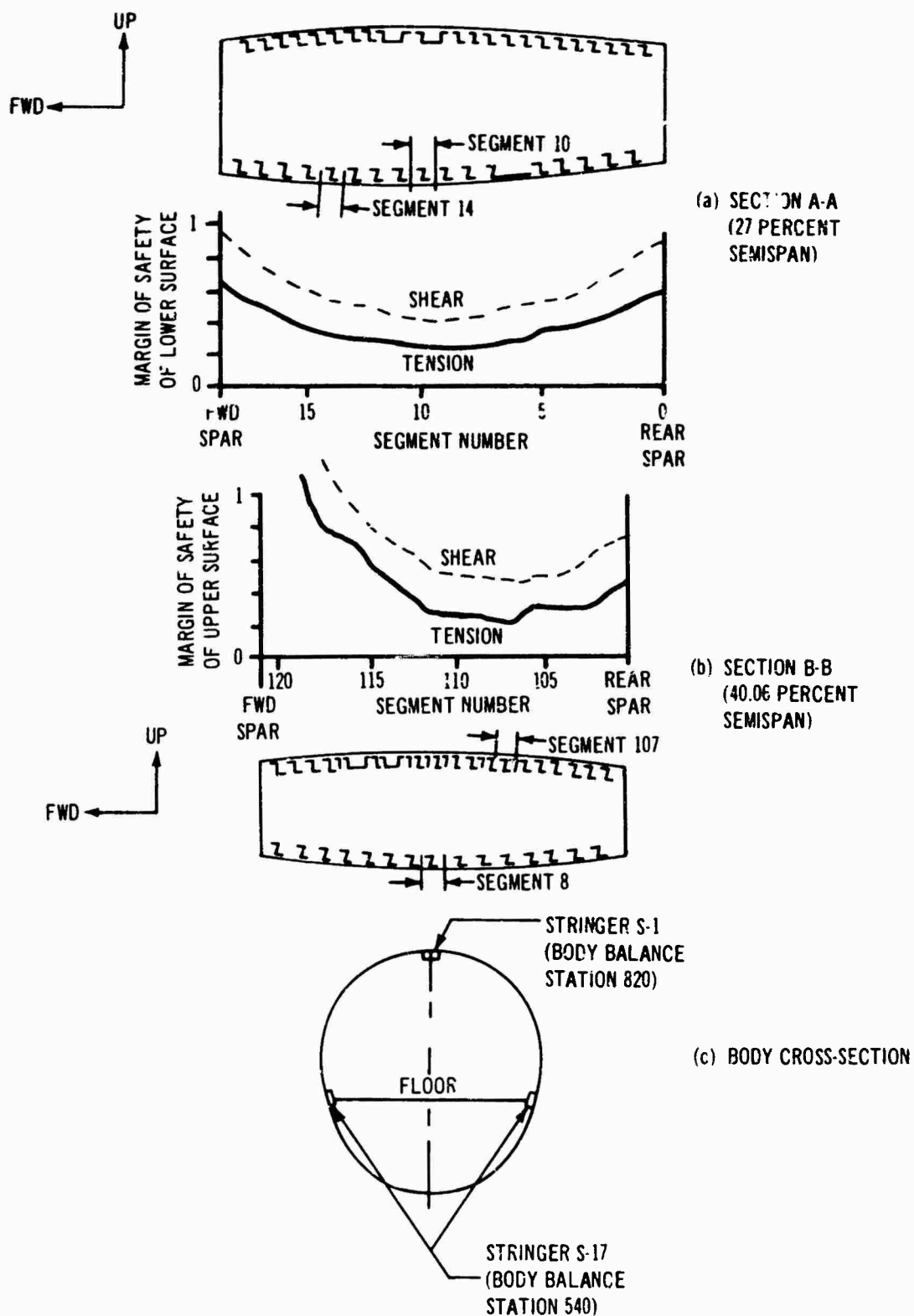


Figure 6. Segment Locations and Typical Distributions of Margins of Safety

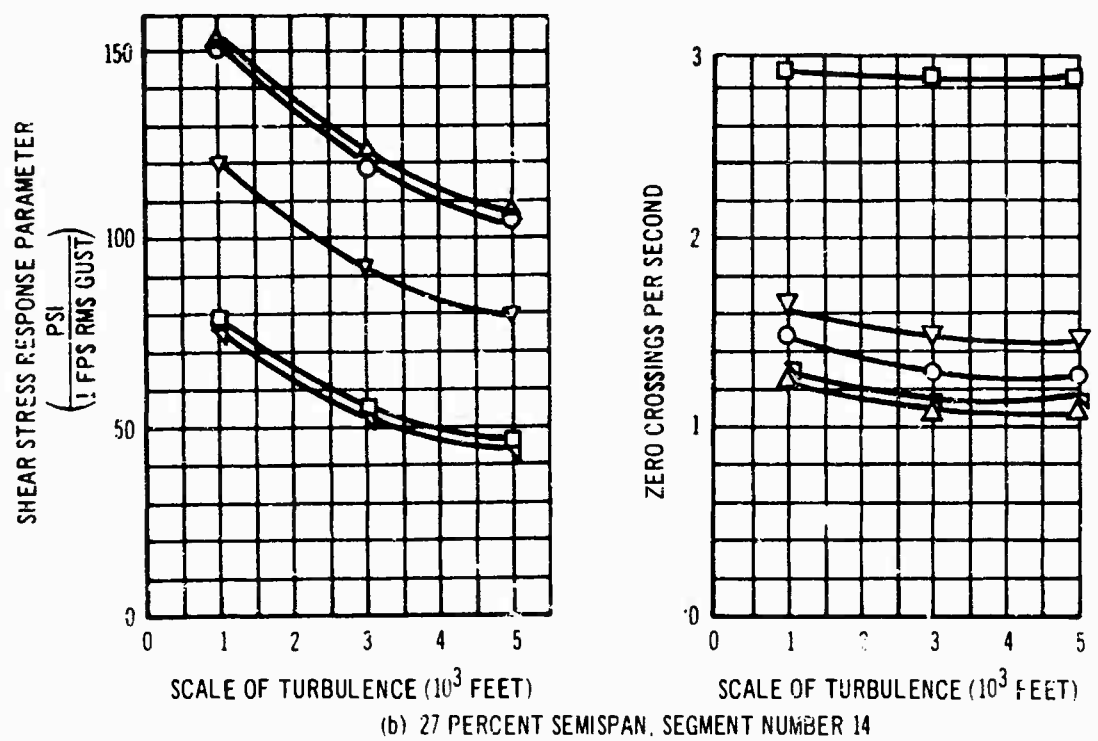
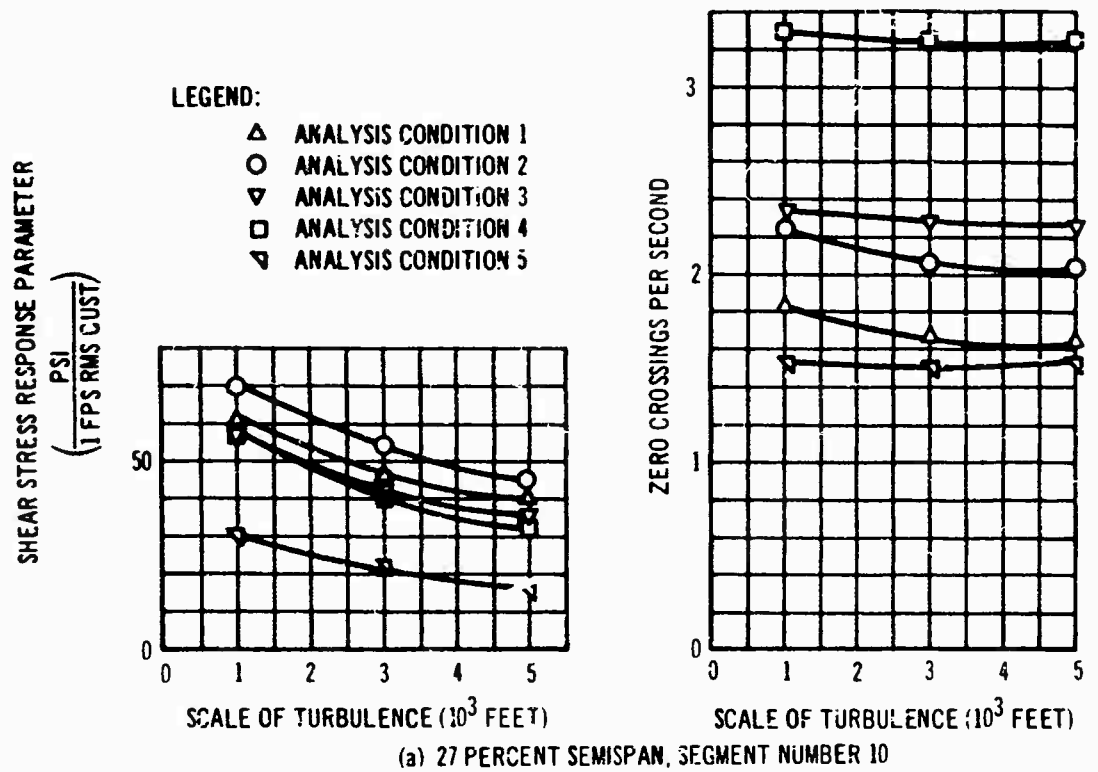


Figure 7. Response Parameters and Zero-Crossing Rates for Shear Stress

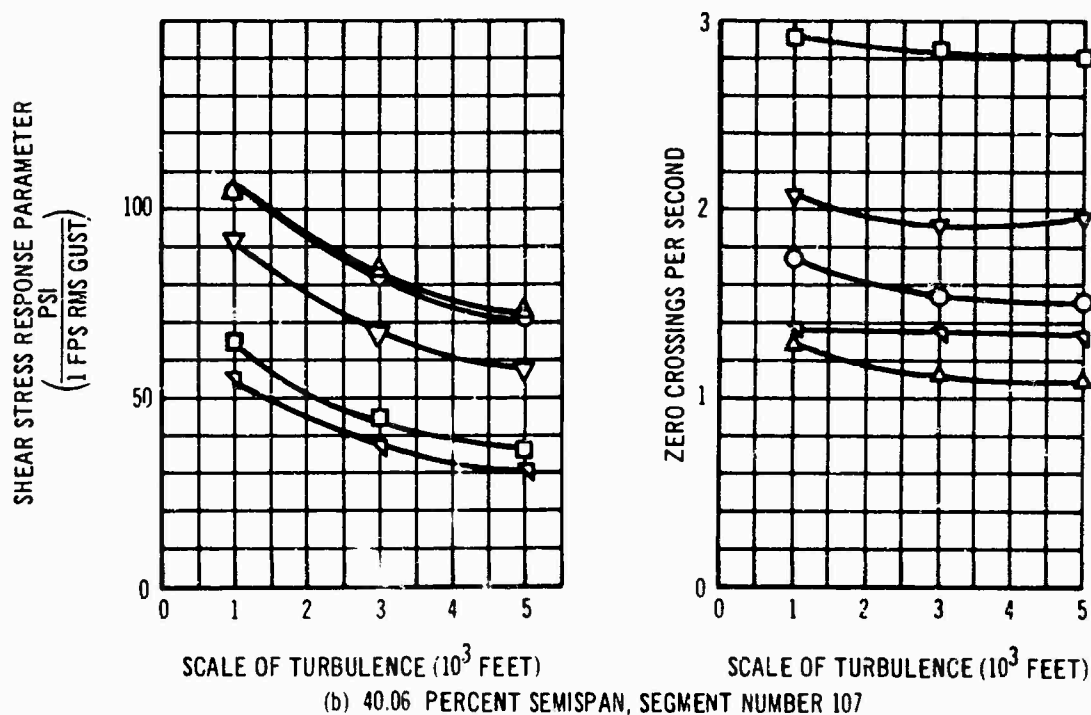
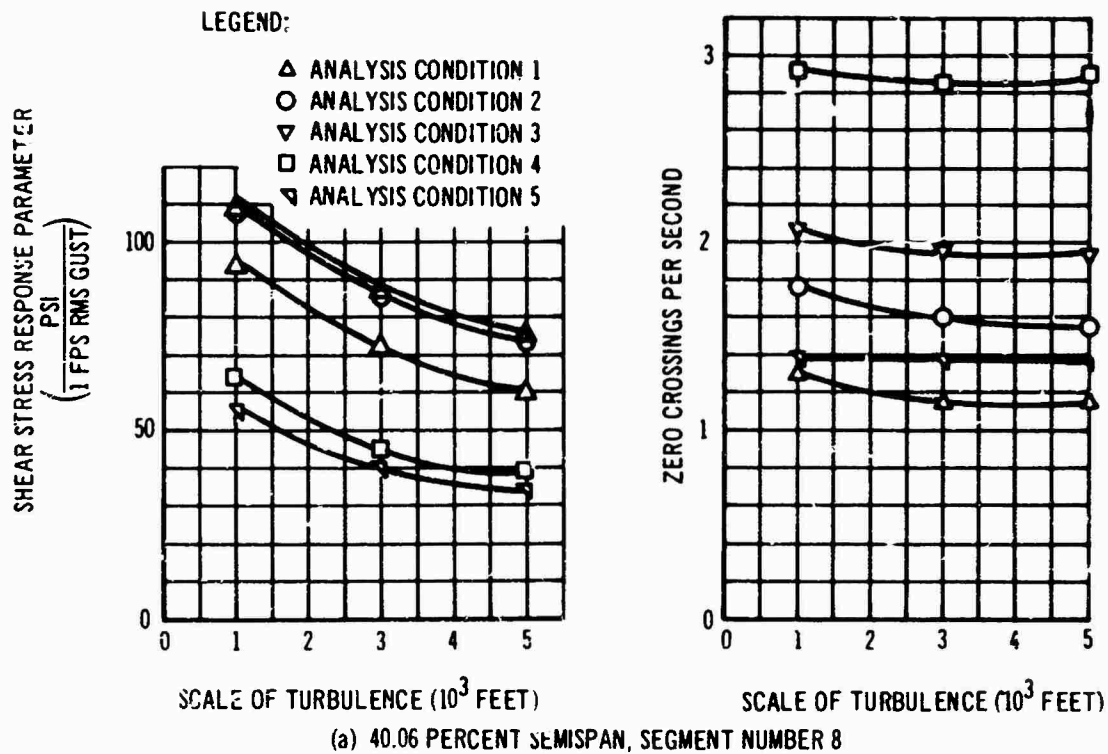
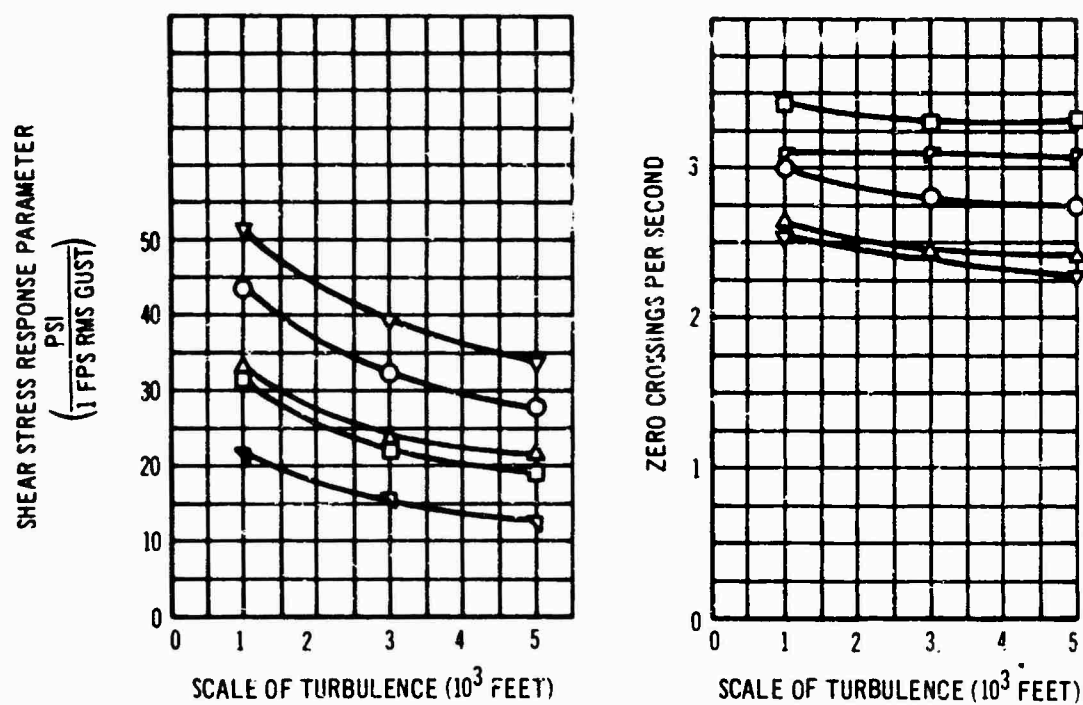


Figure 7 --- Continued

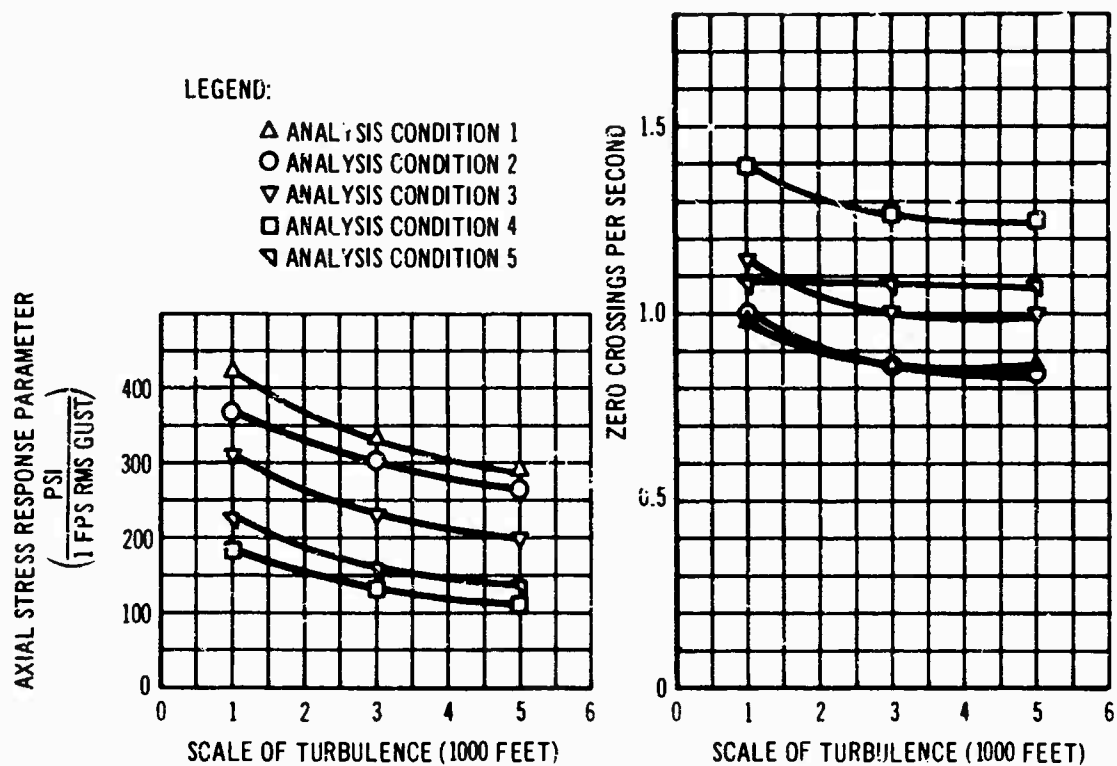


BODY BALANCE STATION 540, STRINGER S-7

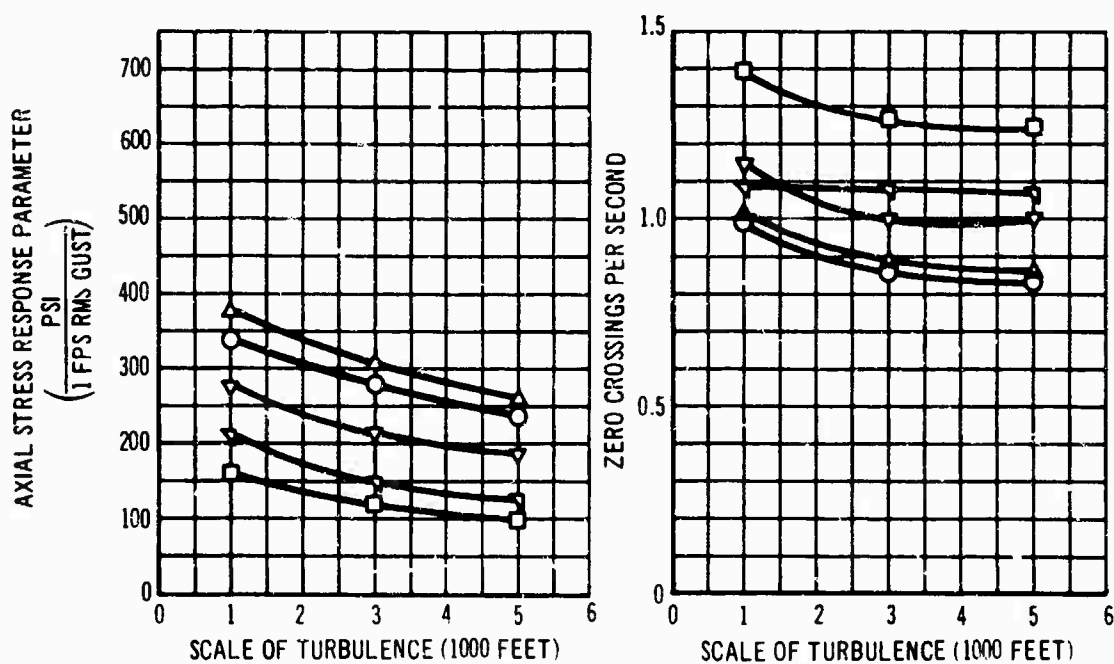
LEGEND:

- △ ANALYSIS CONDITION 1
- ANALYSIS CONDITION 2
- ▽ ANALYSIS CONDITION 3
- ANALYSIS CONDITION 4
- ◁ ANALYSIS CONDITION 5

Figure 7 --- Concluded

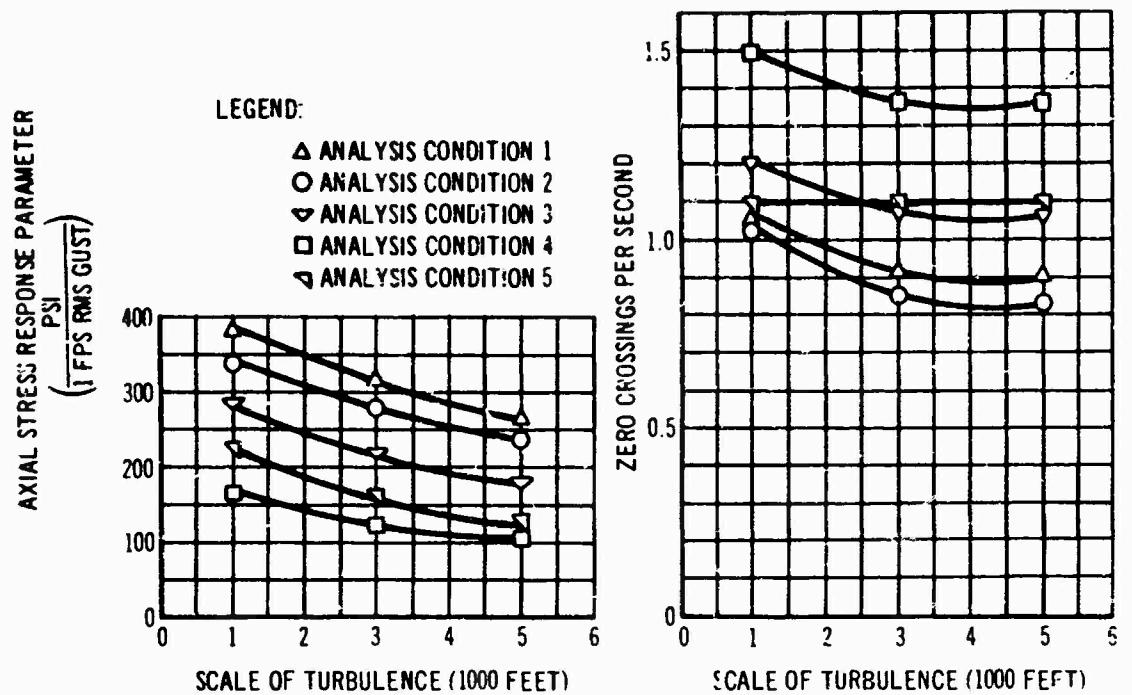


(a) 27 PERCENT SEMISPAN, SEGMENT NUMBER 10

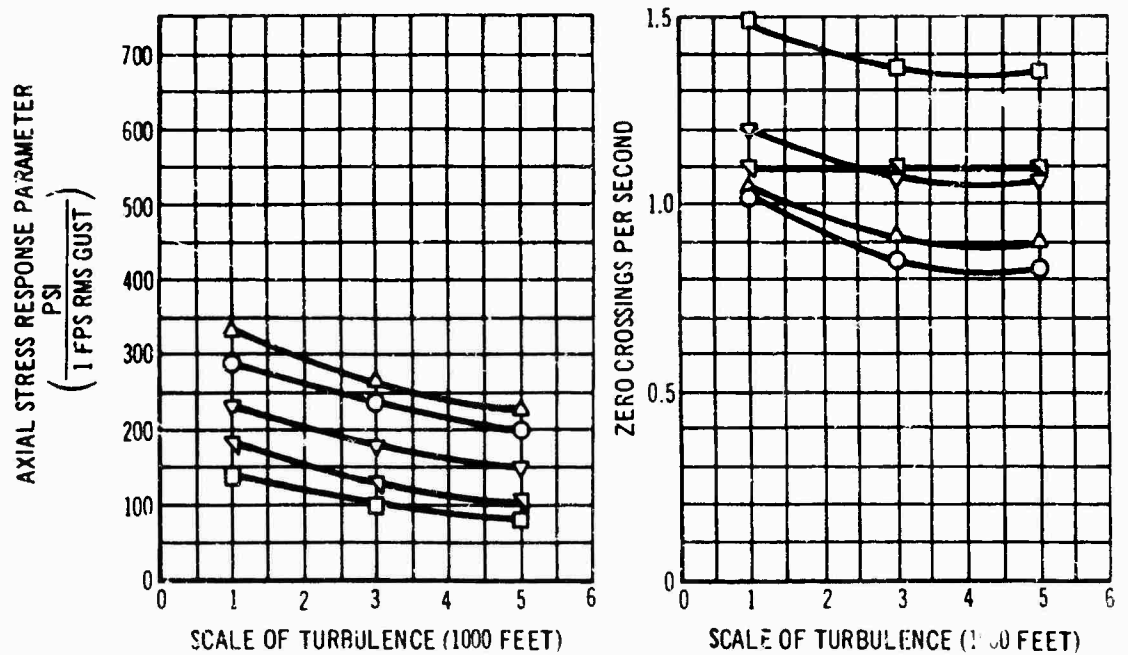


(b) 27 PERCENT SEMISPAN, SEGMENT NUMBER 14

Figure 8. Response Parameters and Zero Crossing Rates for Axial Stress



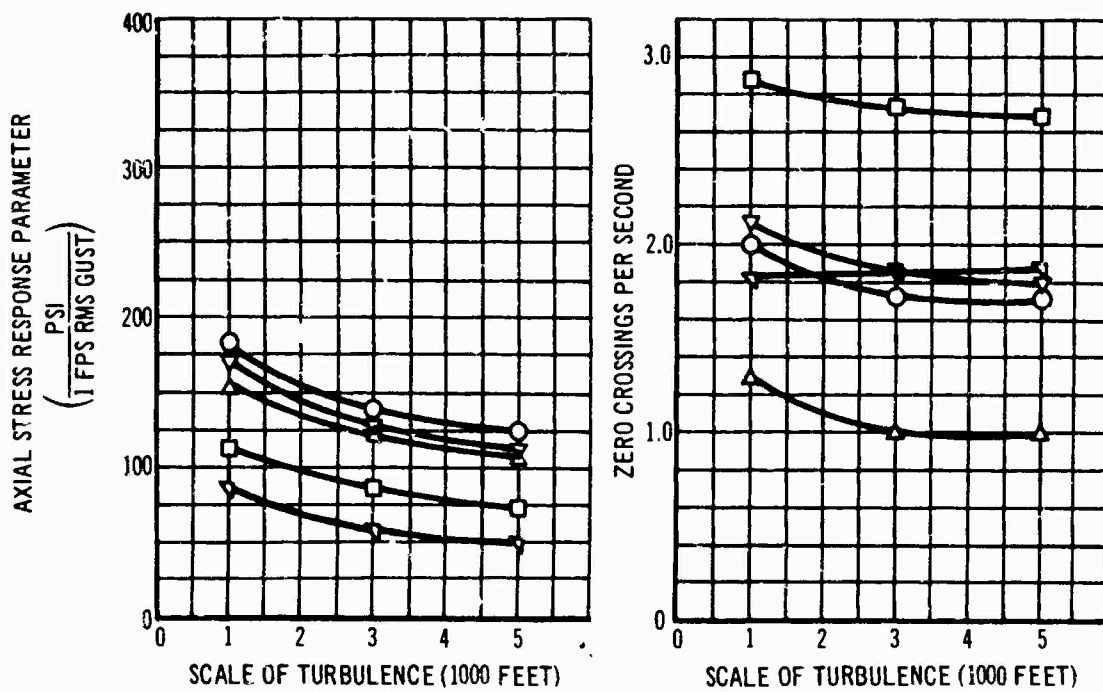
(a) 40.06 PERCENT SEMISPAN, SEGMENT NUMBER 8



(b) 40.06 PERCENT SEMISPAN, SEGMENT NUMBER 107

Figure 8 --- Continued

BODY BALANCE STATION 820



LEGEND:

- △ ANALYSIS CONDITION 1
- ANALYSIS CONDITION 2
- ▽ ANALYSIS CONDITION 3
- ANALYSIS CONDITION 4
- ◊ ANALYSIS CONDITION 5

Figure 8 --- Concluded

condition in appendix VI. The tabulated data show that changing the upper cutoff frequency from 10 to 15 and 20 cycles per second, as specified by Dr. Houbolt, has a negligible effect on A and N_0 . This is due to the highest elastic modes in the analysis having frequencies less than 10 cps, resulting in little response above that frequency.

Zero-crossing rate versus the ratio of incremental limit allowable stress to stress response parameter is plotted in figures 9 and 10. It should be noted that the critical condition is that of maximum gross weight and high dynamic pressure combined with a scale of turbulence of 1,000 feet. These data are directly comparable to the σ_{W^1D} of reference 11, remembering that in that report the scale of turbulence is 2,500 feet and, whereas the KC-135 airplane is designed to a 2g load factor, the 720 airplane is designed to a 2.5g load factor. The consequence of this is that the KC-135 has lower margins of safety for gust for the maximum gross weight conditions and a resultingly lower ratio of incremental limit allowable stress to stress response parameter.

The incremental limit allowable stresses tabulated in appendix VII are obtained from the stress interaction diagram for each section for which stresses are desired. A few definitions follow:

1. Allowable stress: the maximum stress at which failure will occur
2. Limit allowable stress: the allowable stress divided by 1.50
3. Incremental stress: the increment of stress above the 1g flight stress

A typical stress interaction diagram is shown in figure 11. Curve 1 is a plot of the following equation:

$$\left(\begin{array}{c} \text{Limit allowable} \\ \text{shear principal stress} \end{array} \right) = \sqrt{\left(\frac{\text{Axial skin tension stress}}{2} \right)^2 + (\text{Skin shear stress})^2}$$

Curve 2 is a plot of:

$$\left(\begin{array}{c} \text{Limit allowable} \\ \text{tensile principal stress} \end{array} \right) = \left(\frac{\text{Axial skin tension stress}}{2} \right) + \sqrt{\left(\frac{\text{Axial skin tension stress}}{2} \right)^2 + \left(\frac{\text{Skin shear stress}}{2} \right)^2}$$

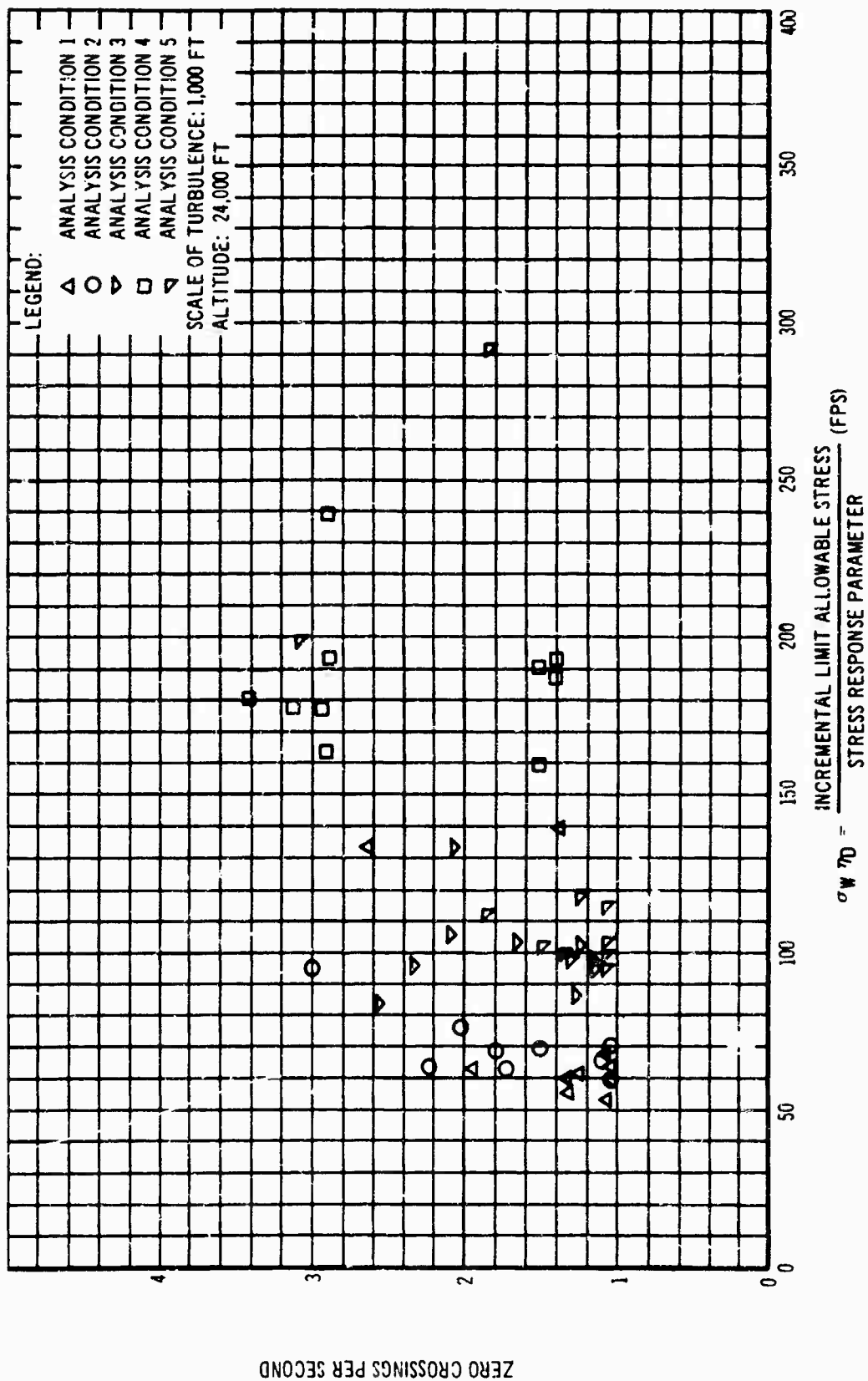
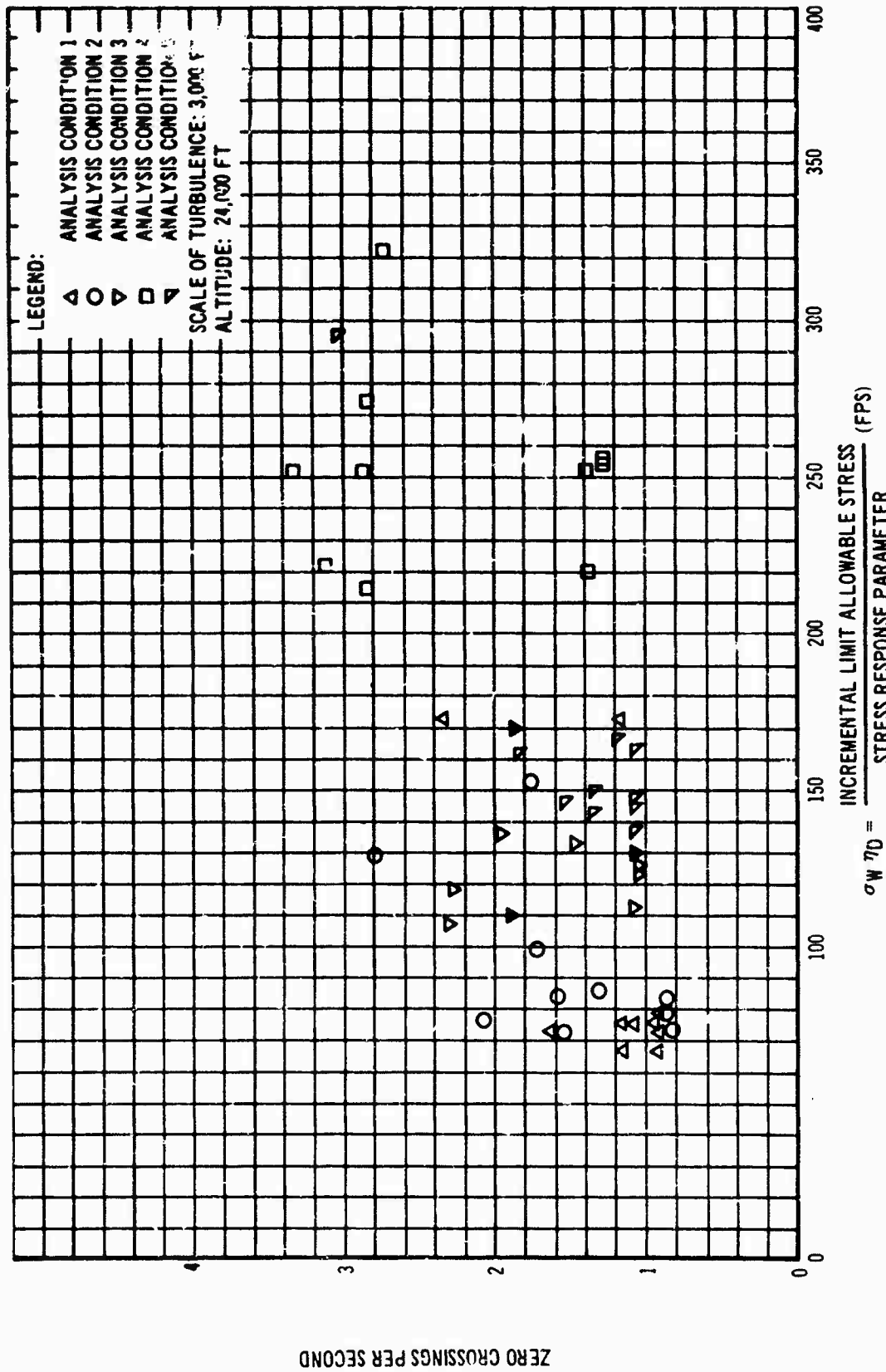


Figure 9. Zero-Crossing Rates Versus $\sigma_w \eta_D$ (Linear Plot)



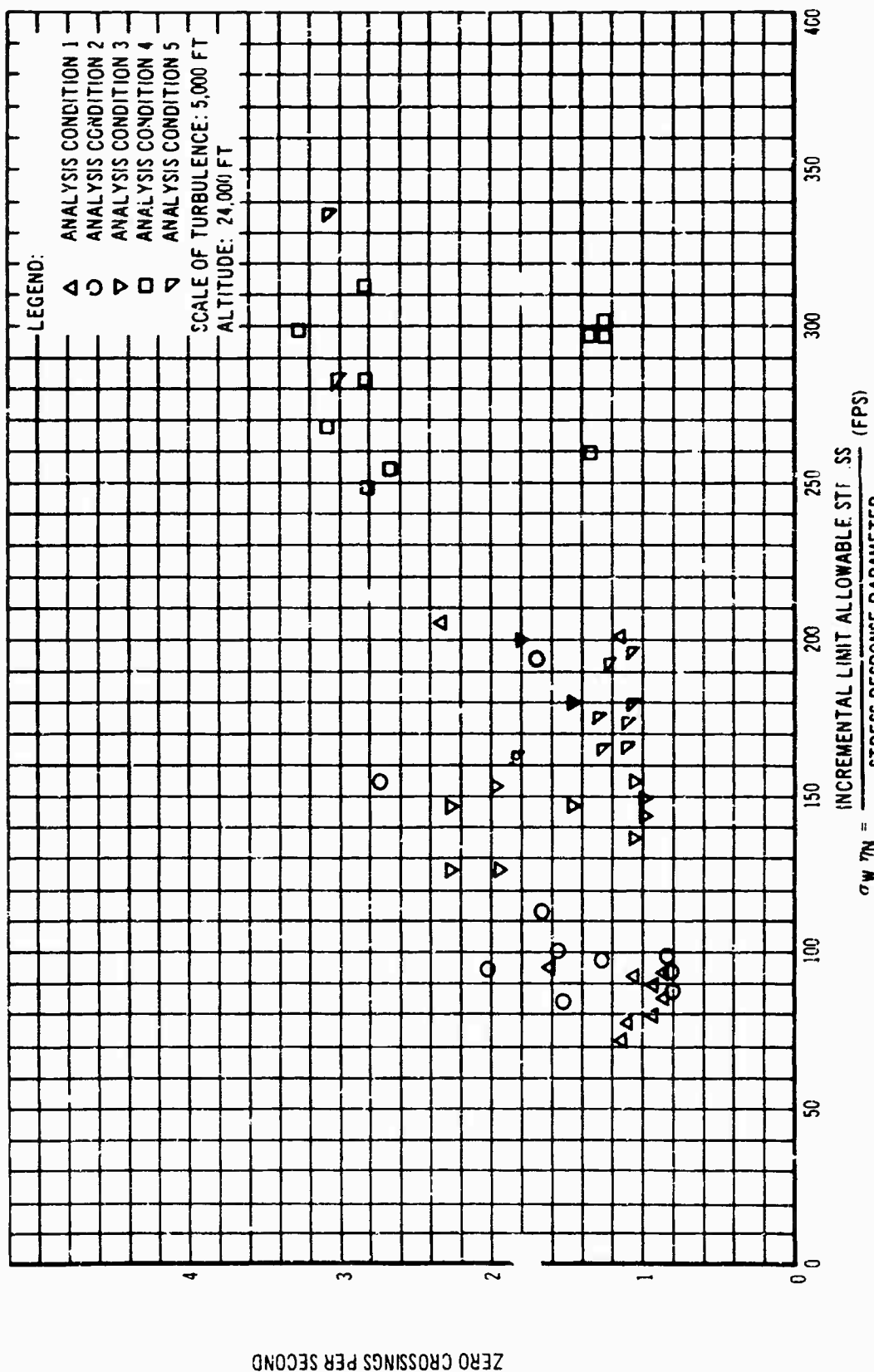


Figure 9 --- Concluded

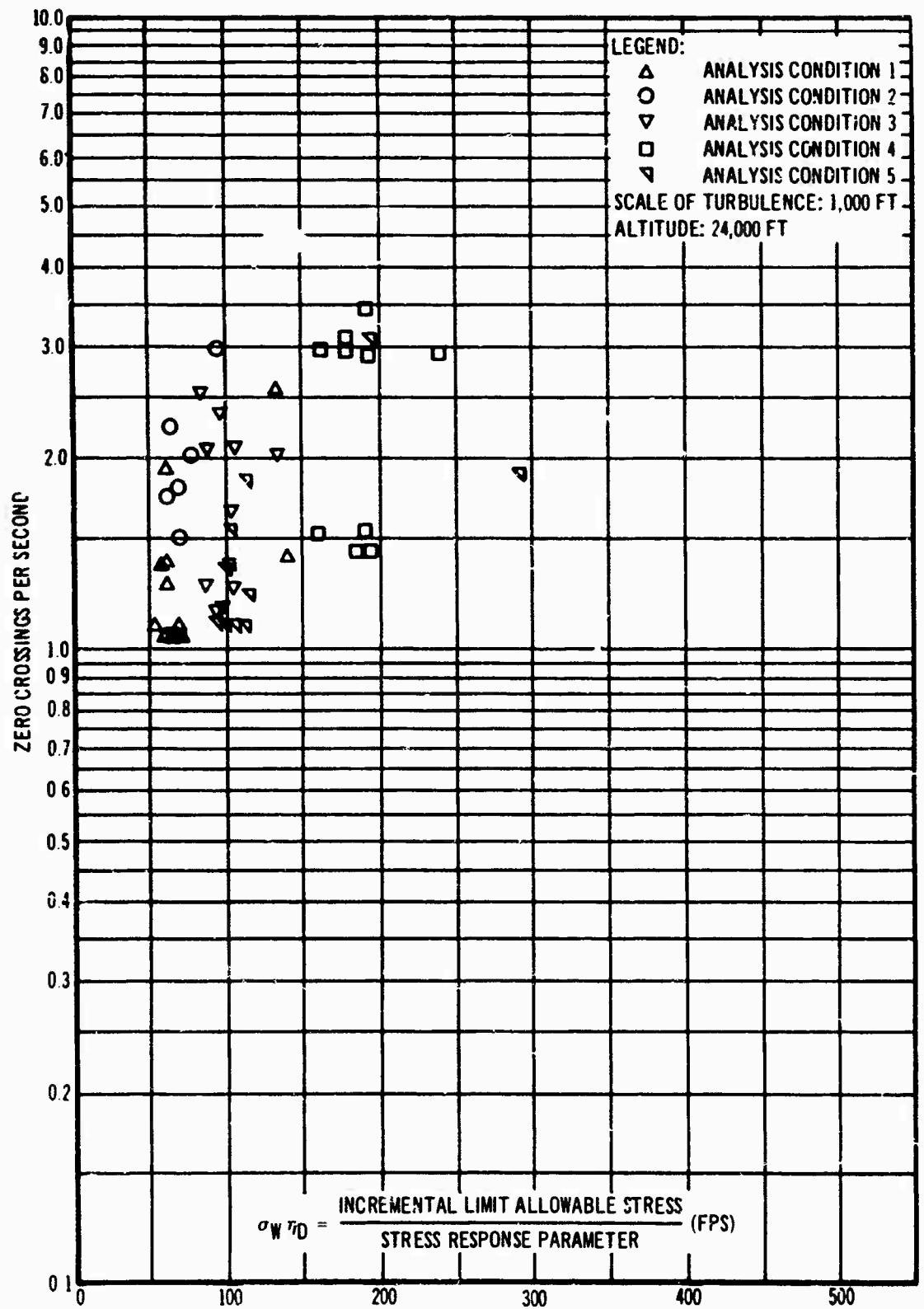


Figure 10. Zero-Crossing Rates Versus $\sigma_W \eta_D$ (Semilog Plot)

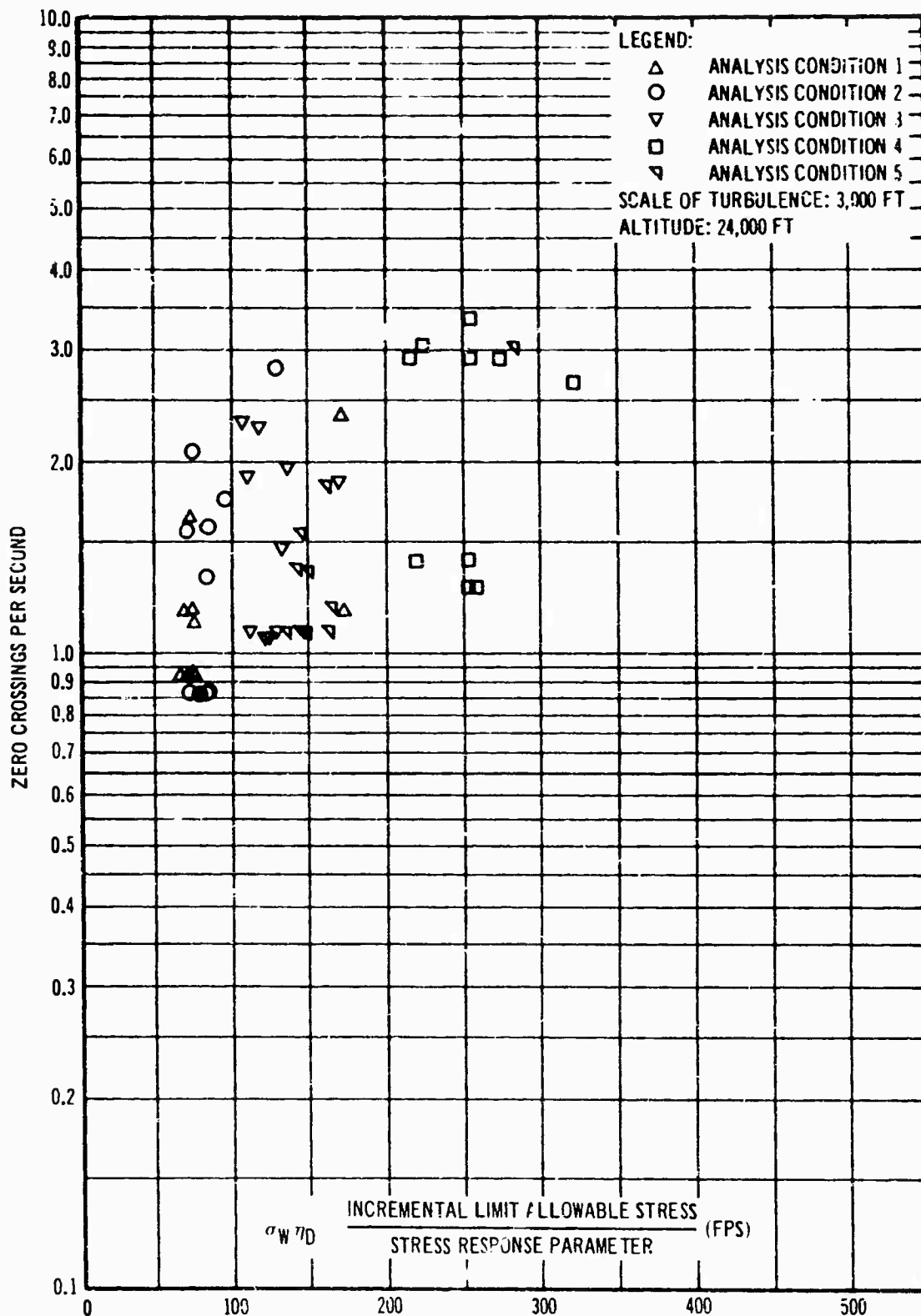


Figure 10 --- Continued

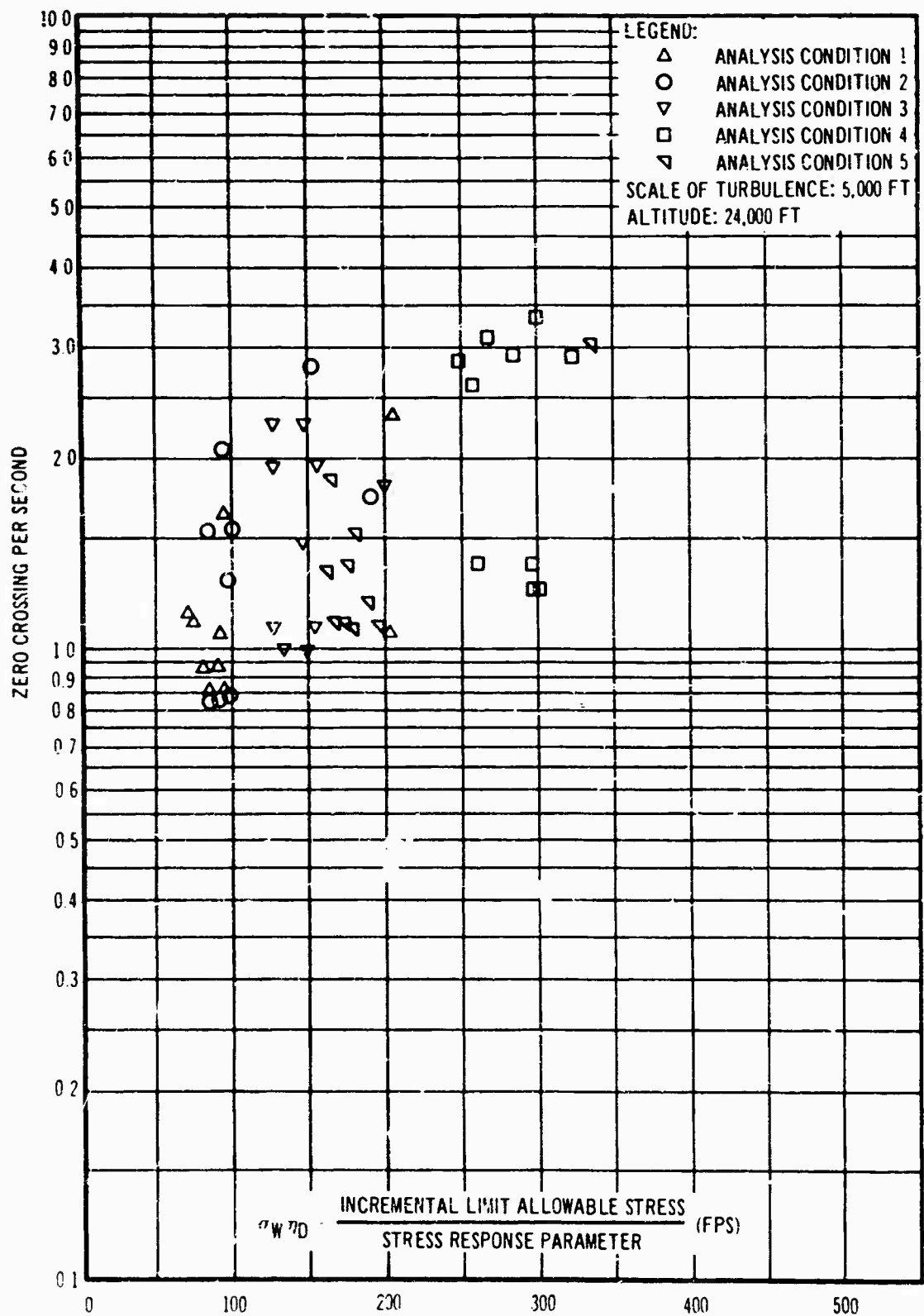


Figure 10 --- Concluded

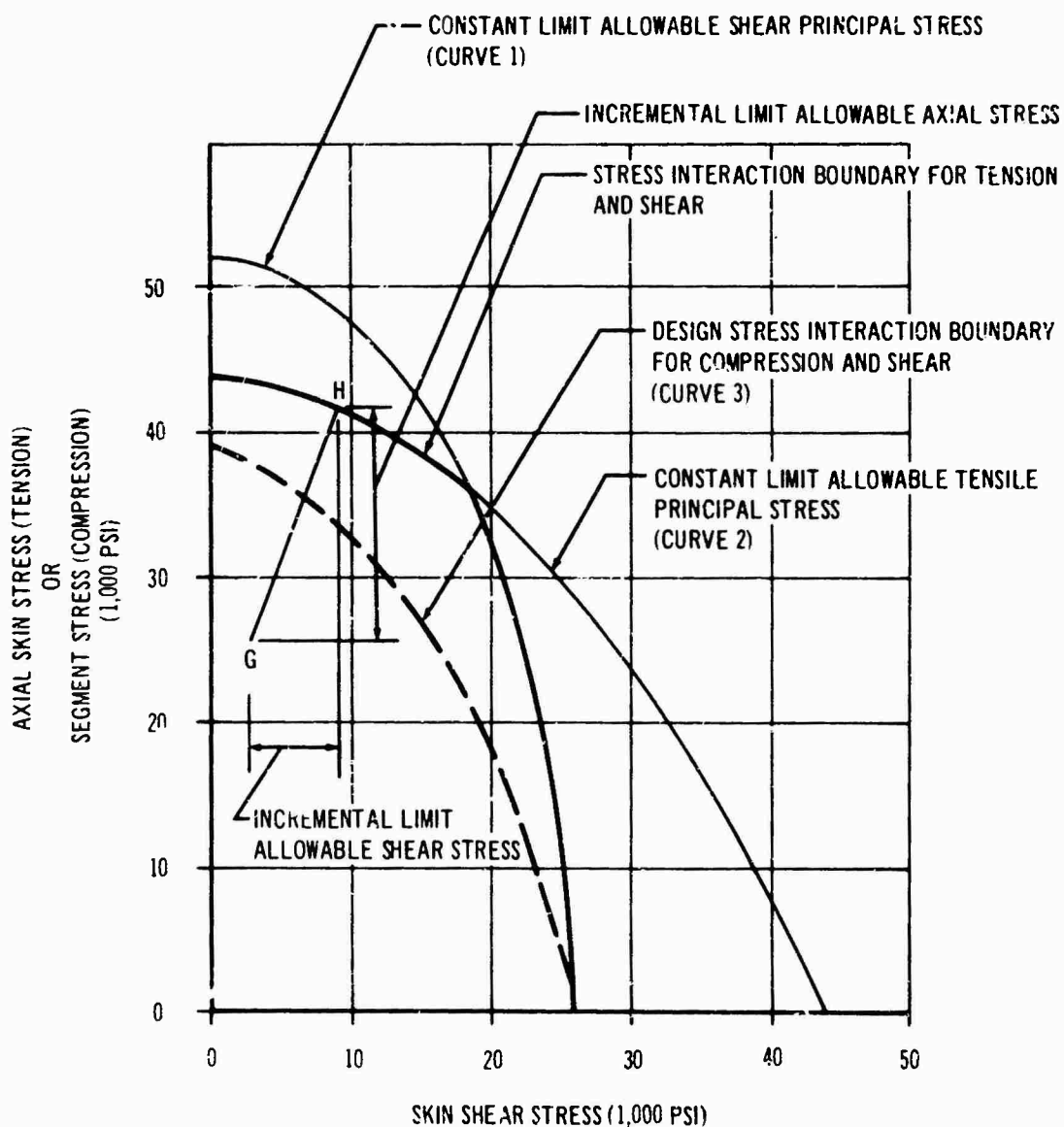
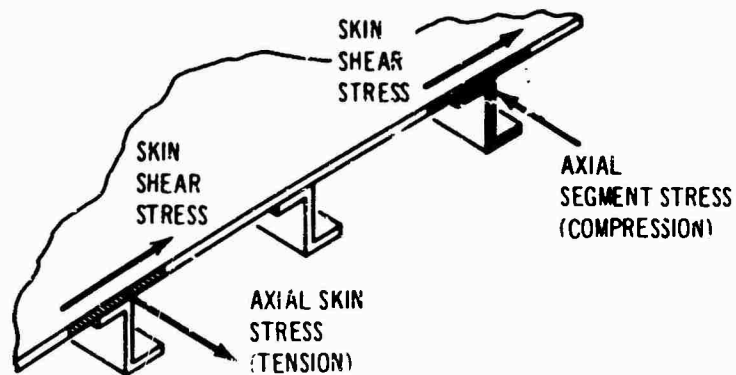


Figure 11. Stress Interaction Diagram

As shown in figure 11, the stress interaction curve used in design is formed by portions of these two curves and represents the combination of axial tension and shear that give the lower of the limit allowable shear or tensile principal stresses. Curve 3, the stress interaction curve for compression and shear, is a plot of:

$$\left(\frac{\text{Limit allowable compression stress}}{\text{compression stress}} \right) = \frac{\left(\frac{\text{Axial segment compression stress}}{2} \right)}{2} + \sqrt{\left[\frac{\left(\frac{\text{Axial segment compression stress}}{2} \right)^2}{2} + \left(\frac{\text{Skin shear stress}}{\left(\frac{\text{Limit allowable compression stress}}{\text{Limit allowable shear principal stress}} \right)} \right)^2}$$

The segment referred to in the equations includes the stringer area in addition to that of the skin; the area of both is used when computing compressive stresses. The limit allowable compressive stress is not a true principal stress, and its equation is an empirical variation of Mohr's circle equation for compression principal stress. Knowing the limit allowable shear, tension, and compression stresses, the stress interaction diagram is drawn. The next step is to determine the incremental limit allowable stresses.

The incremental limit allowable stress is derived in the following manner: The 1g flight axial and shear stresses at a particular point in the wing are plotted as point G in figure 11. Point H in figure 11 is determined by drawing a line from point G having a slope equal to the ratio of axial stress response parameter to the shear stress response parameter. The slope of line G-H is based on the assumption of 100-percent correlation between axial and shear stress. The resulting incremental limit allowable axial and shear stresses are shown in the figure. A method of analysis which includes the effect of correlation between stresses is described in reference 11.

SECTION IV

CONCLUSIONS

The minimum value of $\sigma_W^2 D$ for all the conditions investigated is 53, which is for the maximum-gross-weight high-speed flight condition and the 1,000-foot scale of turbulence.

The most critical (largest) value of stress response parameter is for the 1,000-foot scale of turbulence and the heavy gross weight, high-speed conditions. Reducing the gross weight, lowering the speed, and increasing the scale of turbulence reduces the value of the stress response parameter.

The largest zero-crossing rate is associated with the lowest-gross-weight airplane and is little affected by the scale of turbulence.

The stress response parameter and zero-crossing rate are little affected by the upper cutoff frequency, where the cutoff frequency is above the highest modal frequency included in the analysis.

APPENDIX I WEIGHT DATA

Table IV. Weight Condition A (Maximum Zero Flap Weight; Gross Weight: 297,000 Pounds)

BODY

Panel number	Body balance station	Weight (lb)	Center-of-gravity location (in.)			Moment of inertia about cg (lb-in. ² x 10 ⁻⁶)		
			Body balance station	Body buttock line	Body waterline ^e	Pitch	Roll	Yaw
1	130 to 259	2,771	220	0	218	4.45	3.95	3.57
2 ^a	259 to 360	5,290	320		207	15.5	14.6	11.3
3	360 to 420	9,810	393		189	12.1	18.1	12.6
4	420 to 480	11,715	450		182	11.9	20.5	15.7
5	480 to 540	11,482	510		181	10.4	18.8	15.3
6	540 to 620	11,633	571		182	12.3	31	15.9
7	620 to 755	3,055	689		210	11	11.2	9.33
8	755 to 820	1,500	802		208	3.68	5.47	2.88
9 ^b	820 to 890	9,333	872		185	12.7	27.2	26.5
10	890 to 960	2,037	926		209	5.11	7.43	4.03
11	960 to 1020	11,823	989		183	10.1	18.7	15.9
12	1020 to 1080	10,717	1,050		189	8.61	15.9	13.7
13	1080 to 1140	10,042	1,110		184	8.56	16.3	12.2
14	1140 to 1200	10,004	1,170		189	10.6	18.3	12.4
15	1200 to 1280	5,958	1,223		191	5.47	9.94	7.57
16	1280 to 1360	1,252	1,321		217	2.58	3.79	2.55
17	1360 to 1440	5,035	1,406		220	3.63	6.45	6.85
18 ^c	1440 to 1676	9,697	1,569	0	288	130	113	102

WING/SIDE

1	0 to 70.5	14,177	732.2	36.5	182.7	47.1	7.73	51.7
2 ^d	70.5 to 157.2	19,774	764.2	112.7	185.8	92.6	15	103
3	157.2 to 235.8	11,893	805.4	195.6	192.4	42.2	6.05	47.4
4	235.8 to 314.4	8,004	855.1	271.1	191.3	18.1	4.04	21
5	314.4 to 393	6,593	897.4	348.6	195.6	12.3	3.82	15.3
6	393.0 to 471.6	4,733	950.1	429.2	205.2	7.56	2.70	9.80
7	471.6 to 550.2	1,798	988.7	496.8	210.7	3.59	0.818	4.23
8	550.2 to 628.8	1,937	1,058.2	595.2	236.7	1.93	1.12	2.44
9	628.8 to 707.4	1,615	1,092	663.9	243.1	1.37	0.911	2.15
10	707.4 to 786.6	1,558	1,149.1	735.2	249.7	0.683	0.314	0.970

Fuel density at 6.5 pounds per gallon

Notes: a Includes nose gear in the UP position

b Includes tires, truck assembly, air, wheels, and side strut of main landing gear in the UP position

c Includes the horizontal tail, vertical tail, and refueling boom

d Includes inner cylinder, center cylinder, trunnion, and landing gear support structure in wing

e Cruise condition

Table IV --- Concluded

TOTAL AIRPLANE

Airplane section	Weight (lb)	Center-of-gravity location (in.)			Moment of inertia about cg (lb-in. ² x 10 ⁻⁶)		
		Body balance station	Body buttock line	Body waterline ^e	Pitch	Roll	Yaw
Body	133,154	858.4	0	196.9	19,200	452	19,200
Wing	142,164	823.8	212.4	192.9	1,770	3,960	5,650
Nacelles	10,938	713.7	322	159	16.9	2.64	15.7
Nacelles	10,744	898.1	552	197	16.2	2.60	15
Total/avg	297,000	837.9	0	193.6	21,400	15,300	35,900

Table V. Weight Condition B (Maximum Transfer Weight; Gross Weight: 268,000 Pounds)

BODY

Panel number	Body balance station	Weight (lb)	Center-of-gravity location (in)			Moment of inertia about cg (lb-in. ² x 10 ⁻⁶)		
			Body balance station	Body buttock line	Body waterline ^e	Pitch	Roll	Yaw
1	130 to 259	2,771	220	0	216	4.45	3.95	3.57
2 ^a	259 to 360	5,290	320	↓	207	15.5	14.6	11.3
3	360 to 420	9,810	393		189	12.1	18.1	12.6
4	420 to 480	11,715	450		182	11.9	20.5	15.7
5	480 to 540	11,482	510		181	10.4	18.8	15.3
6	540 to 620	11,633	571		182	12.3	21	15.9
7	620 to 755	3,055	689		210	11	11.2	9.33
8	755 to 820	1,500	802		208	3.68	5.47	2.58
9 ^b	820 to 890	9,333	872		185	12.7	7.2	26.5
10	890 to 960	2,037	926		209	5.11	7.43	4.03
11	960 to 1020	11,823	989		183	10.1	18.7	15.9
12	1020 to 1080	10,717	1,050		189	8.61	15.9	13.7
13	1080 to 1140	10,042	1,110		184	8.56	16.3	12.2
14	1140 to 1200	10,004	1,170		189	10.6	18.3	12.4
15	1200 to 1280	5,958	1,223		191	5.47	9.94	7.57
16	1280 to 1360	1,252	1,321		217	2.58	3.79	2.55
17	1360 to 1440	9,273	1,408		233	6.38	11.6	11.8
18 ^c	1440 to 1676	10,057	1,564	0	287	136	114	108

WING SIDE

1	0 to 70.5	14,177	732.2	36.5	182.7	47.1	7.73	51.7
2 ^d	70.5 to 157.2	18,531	765.4	110.5	181	89	12.8	98.4
3	157.2 to 235.8	7,039	819.3	195.5	177.8	27	4.49	30.9
4	235.8 to 314.4	6,177	868.5	275.9	185.9	12.4	2.95	14.8
5	314.4 to 393	4,521	900	346.6	188.8	8.92	2.45	11.1
6	393.0 to 471.6	1,598	965.6	424.8	197	3.38	0.947	4.24
7	471.6 to 550.2	951	1,016	506.5	205.5	1.60	0.427	1.97
8	550.2 to 628.8	647	1,053.6	580.7	220.1	1.09	0.311	1.37
9	628.8 to 707.4	378	1,098.5	660	233.4	0.690	0.209	0.885
10	707.4 to 786.6	264	1,151.1	744.5	253.9	0.525	0.204	0.721

Fuel density at 6.5 pounds per gallon

Notes: a Includes nose gear in the UP position

b Includes tires, truck assembly, air, wheels, and side strut of main landing gear in the UP position

c Includes the horizontal tail, vertical tail, and refueling boom

d Includes inner cylinder, outer cylinder, trunnion, and landing gear support structure in wing

e Cruise condition

Table V --- Concluded

TOTAL AIRPLANE							
Airplane section	Weight (lb)	Center-of-gravity location (in.)			Moment of inertia about cg (lb-in. ² x 10 ⁻⁶)		
		Body balance station	Body buttock line	Body waterline ^e	Pitch	Roll	Yaw
Body	137,752	876.9	0	198.7	20,600	468	20,500
Wing	108,566	804.5	169.4	184.3	1,110	2,140	3,220
Nacelles	10,938	713.7	322	159	16.9	2.64	15.7
Nacelles	10,744	898.1	552	197	16.2	2.60	15
Total/avg	268,000	841.8	0	191.2	22,300	10,200	31,800

Table VI Weight Condition C (Intermediate Gross Weight with Structural Reserve Fuel; Gross Weight: 190,590 Pounds)

BODY								
Panel number	Body balance station	Weight (lb)	Center-of-gravity location (in.)			Moment of inertia about cg (lb-in. ² x 10 ⁻⁶)		
			Body balance station	Body buttock line	Body waterline ^e	Pitch	Roll	Yaw
1	130 to 259	2,771	220	0	218	4.45	3.95	3.57
2 ^a	259 to 360	5,290	320		207	15.5	14.6	11.3
3	360 to 420	9,810	393		189	12.1	18.1	12.6
4	420 to 480	11,715	450		182	11.9	20.5	15.7
5	480 to 540	11,482	510		181	10.4	18.8	15.3
6	540 to 620	11,633	571		182	12.3	21	15.9
7	620 to 755	3,055	689		210	11	11.2	9.33
8	755 to 820	1,500	802		208	3.68	5.47	2.88
9 ^b	820 to 890	9,333	872		185	12.7	27.2	26.5
10	890 to 960	2,037	926		209	5.11	7.43	4.03
11	960 to 1020	11,023	909		183	10.1	18.7	15.9
12	1020 to 1080	10,717	1,050		189	8.61	15.9	13.7
13	1080 to 1140	10,042	1,110		184	8.56	16.3	12.2
14	1140 to 1200	10,004	1,170		189	10.6	18.3	12.4
15	1200 to 1280	5,956	1,223		191	5.47	9.94	7.57
16	1280 to 1360	1,252	1,321		217	2.58	3.79	2.55
17	1360 to 1440	5,035	1,406		220	3.63	6.45	6.85
18 ^c	1440 to 1676	9,699	1,569		288	130	113	102

WING/SIDE								
1	0 to 70.5	1,645	746.3	45.6	173	6.13	1.10	6.73
2 ^d	70.5 to 157.2	5,673	816	115.5	176.3	26.9	4.65	30.6
3	157.2 to 235.8	2,793	842.2	196.6	176.1	13.4	2.62	15.4
4	235.8 to 314.4	2,785	868.7	261	180.8	6.24	1.51	7.50
5	314.4 to 393	1,569	906.3	344.3	186.5	4.47	0.876	5.20
6	393.0 to 471.6	1,171	974.9	432.6	196.5	2.58	0.654	3.16
7	471.6 to 550.2	951	1,016	506.5	205.5	1.60	0.427	1.97
8	550.2 to 628.8	647	1,053.6	580.7	220.1	1.09	0.311	1.37
9	628.8 to 707.4	378	1,098.5	660	233.4	0.690	0.209	0.885
10	707.4 to 786.6	264	1,161.1	744.5	253.9	0.525	0.204	0.721

Fuel density at 6.5 pounds per gallon

Notes: a Includes nose gear in the UP position

b Includes tires, truck assembly, air, wheels, and side strut of main landing gear in the UP position

c Includes the horizontal tail, vertical tail, and refueling boom

d Includes inner cylinder, outer cylinder, trunnion, and landing gear support structure in wing

e Cruise condition

Table VI --- Concluded

TOTAL AIRPLANE

Airplane section	Weight (lb)	Center-of-gravity location (in.)			Moment of inertia about cg ($\text{lb-in.}^2 \times 10^{-6}$)		
		Body balance station	Body buttock line	Body waterline ^c	Pitch	Roll	Yaw
Body	133,156	858.4	0	196.9	19,200	452	19,200
Wing	35,752	870.5	243.7	184.4	422	1,020	1,420
Nacelles	10,938	713.7	322	159	16.9	2.64	15.7
Nacelles	10,744	898.1	552	197	16.2	2.60	15
Total/avg	190,590	854.6	0	192.4	20,000	8,030	27,400

Table VII. Weight Condition D (Operating Weight Empty with Structural Reserve Fuel; Gross Weight: 107,260 Pounds)

BODY

Panel number	Body balance station	Weight (lb)	Center-of-gravity location (in.)			Moment of inertia about cg (lb-in. ² x 10 ⁻⁶)		
			Body balance station	Body buttock line	Body waterline ^e	Pitch	Roll	Yaw
1	130 to 259	2,771	220	0	218	4.45	3.95	3.57
2 ^a	259 to 360	5,290	320		207	15.5	14.6	11.3
3	360 to 420	2,258	384		215	6.14	9.33	4.78
4	420 to 480	1,495	451		220	3.59	5.45	2.79
5	480 to 540	1,262	513		214	3.03	4.60	2.36
6	540 to 620	1,925	584		212	4.62	7.02	3.60
7	620 to 755	3,055	689		210	11	11.2	9.33
8	755 to 820	1,500	802		208	3.68	5.47	2.88
9 ^b	820 to 890	9,333	872		185	12.7	27.2	26.5
10	890 to 960	2,037	926		209	5.11	7.43	4.03
11	960 to 1020	1,806	982		185	4.33	6.59	3.37
12	1020 to 1080	1,104	1,051		211	2.65	4.03	2.06
13	1080 to 1140	1,145	1,110		214	2.63	4.07	2.14
14	1140 to 1200	1,834	1,174		221	3.94	6.26	3.43
15	1200 to 1280	1,197	1,238		215	2.74	3.97	2.52
16	1280 to 1360	1,252	1,321		217	2.58	3.79	2.55
17	1360 to 1440	1,273	1,395		223	2.07	2.83	2.11
18 ^c	1440 to 1676	9,288	1,574		291	121	111	95.3

WING/SIDE

1	0 to 70.5	1,645	746.3	45.6	173	6.13	1.10	6.73
2 ^d	70.5 to 157.2	5,673	816	115.5	176.3	26.9	4.65	30.6
3	157.2 to 235.8	2,793	842.2	196.6	176.1	13.4	2.62	15.4
4	235.8 to 314.4	2,785	868.7	261	180.8	6.24	1.51	7.50
5	314.4 to 393	1,569	906.3	344.3	186.5	4.47	0.876	5.20
6	393.0 to 471.6	1,171	974.9	432.6	196.5	2.58	0.654	3.16
7	471.6 to 550.2	951	1,016	506.5	205.5	1.60	0.427	1.97
8	550.2 to 628.8	647	1,053.6	580.7	220.1	1.09	0.311	1.37
9	628.8 to 707.4	378	1,098.5	660	233.4	0.690	0.209	0.885
10	707.4 to 786.6	264	1,161.1	744.5	253.9	0.525	0.204	0.721

Fuel density at 6.5 pounds per gallon

Notes: a Includes nose gear in the UP position

b Includes tires, truck assembly, air, wheels, and side strut of main landing gear in the UP position

c Includes the horizontal tail, vertical tail, and refueling boom

d Includes inner cylinder, outer cylinder, trunnion, and landing gear support structure in wing

e Cruise condition

Table VII --- Concluded

TOTAL AIRPLANE

Airplane section	Weight (lb)	Center-of-gravity location (in.)			Moment of inertia about cg (lb-in. ² x 10 ⁻⁶)		
		Body balance station	Body buttock line	Body waterline ^e	Pitch	Roll	Yaw
Body	49,826	900	0	221.4	9,300	381	9,810
Wing	35,752	870.5	243.7	134.4	422	1,020	1,420
Nacelles	10,938	713.7	322	159	16.9	2.64	15.7
Nacelles	10,744	898.1	552	197	16.2	2.60	15
Total/avg	107,260	871	0	200.3	10,700	7,910	18,100

**APPENDIX II
STIFFNESS DATA**

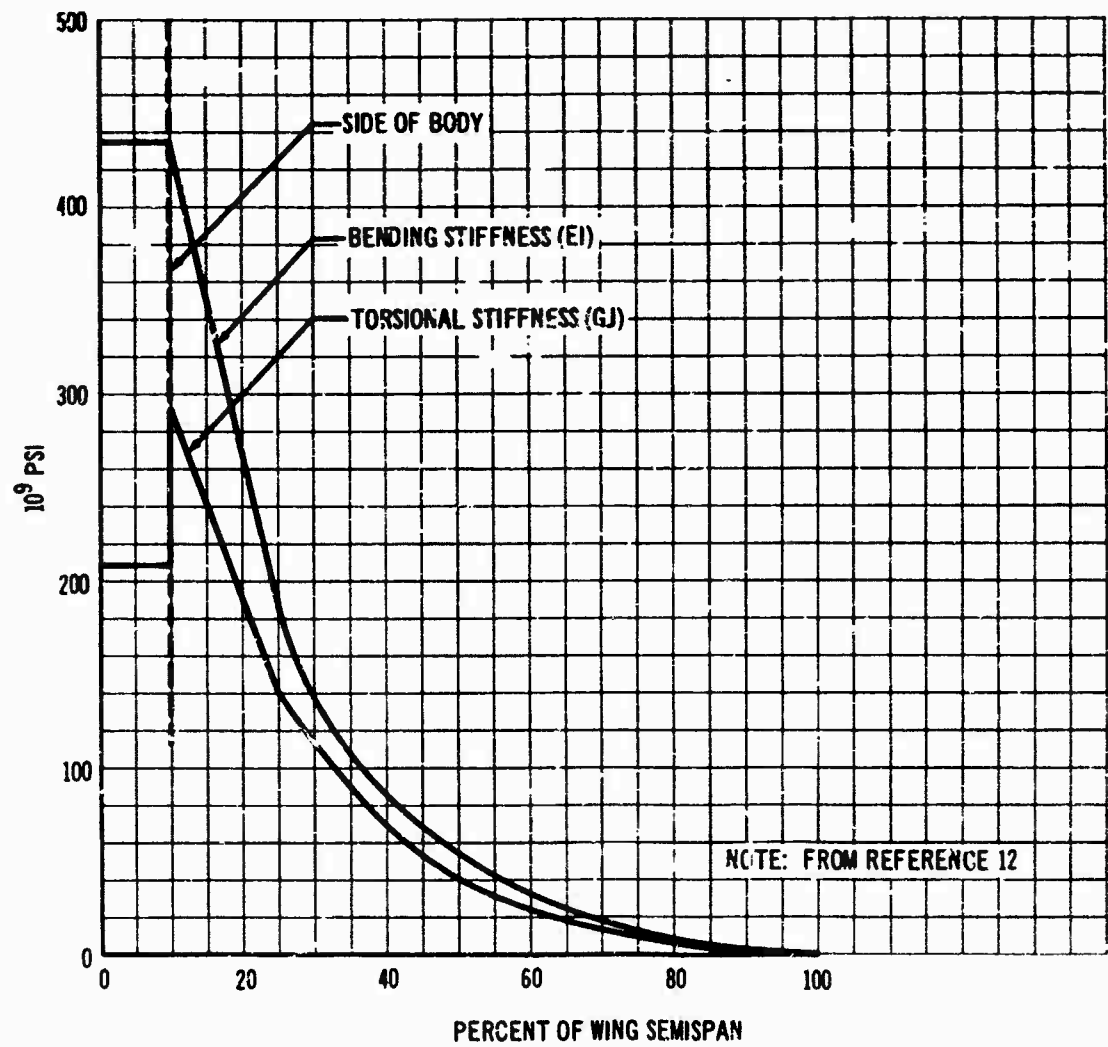


Figure 12. Wing Vertical-Bending and Torsion Stiffness

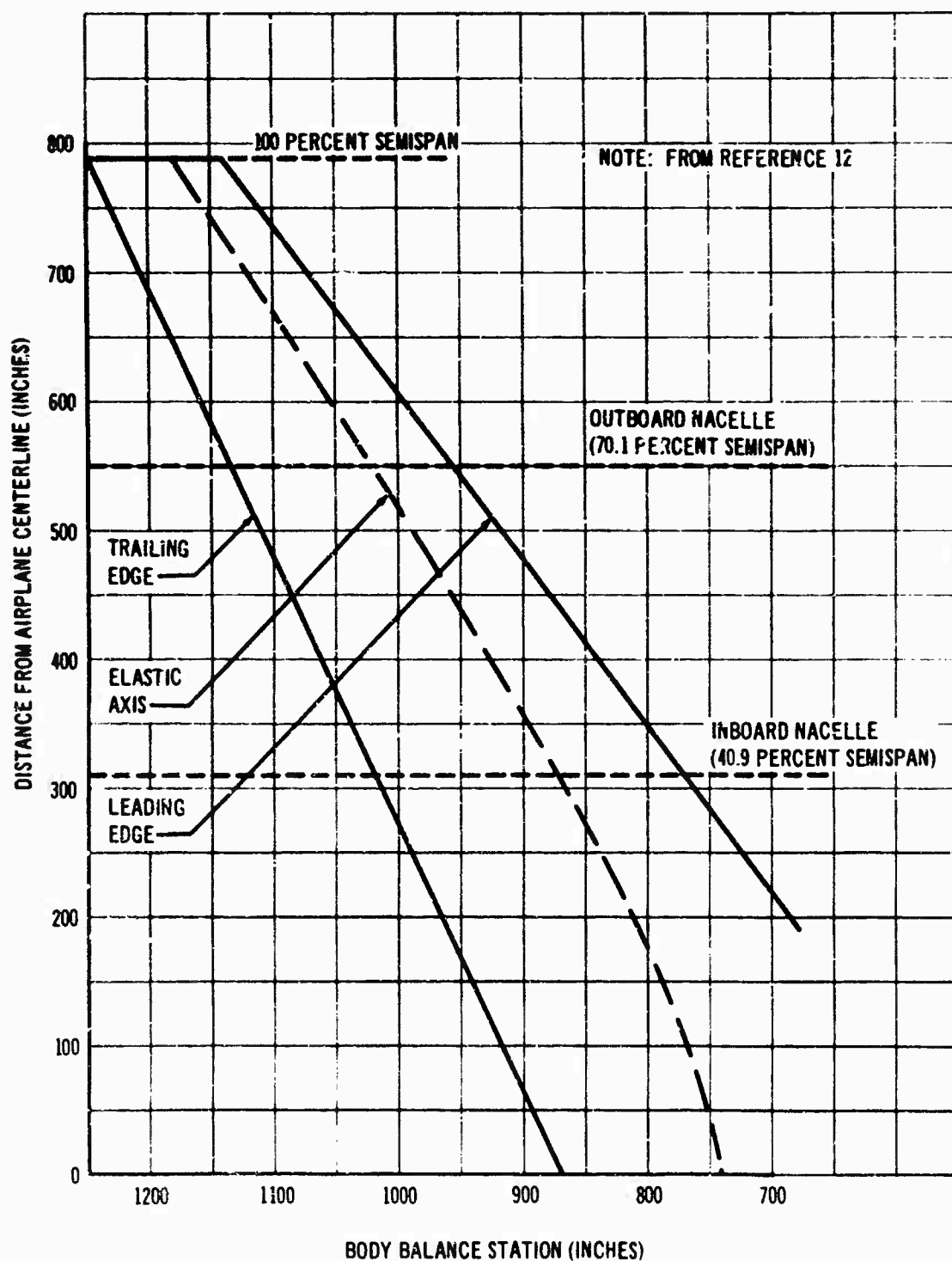


Figure 13. Wing Elastic-Axis Location

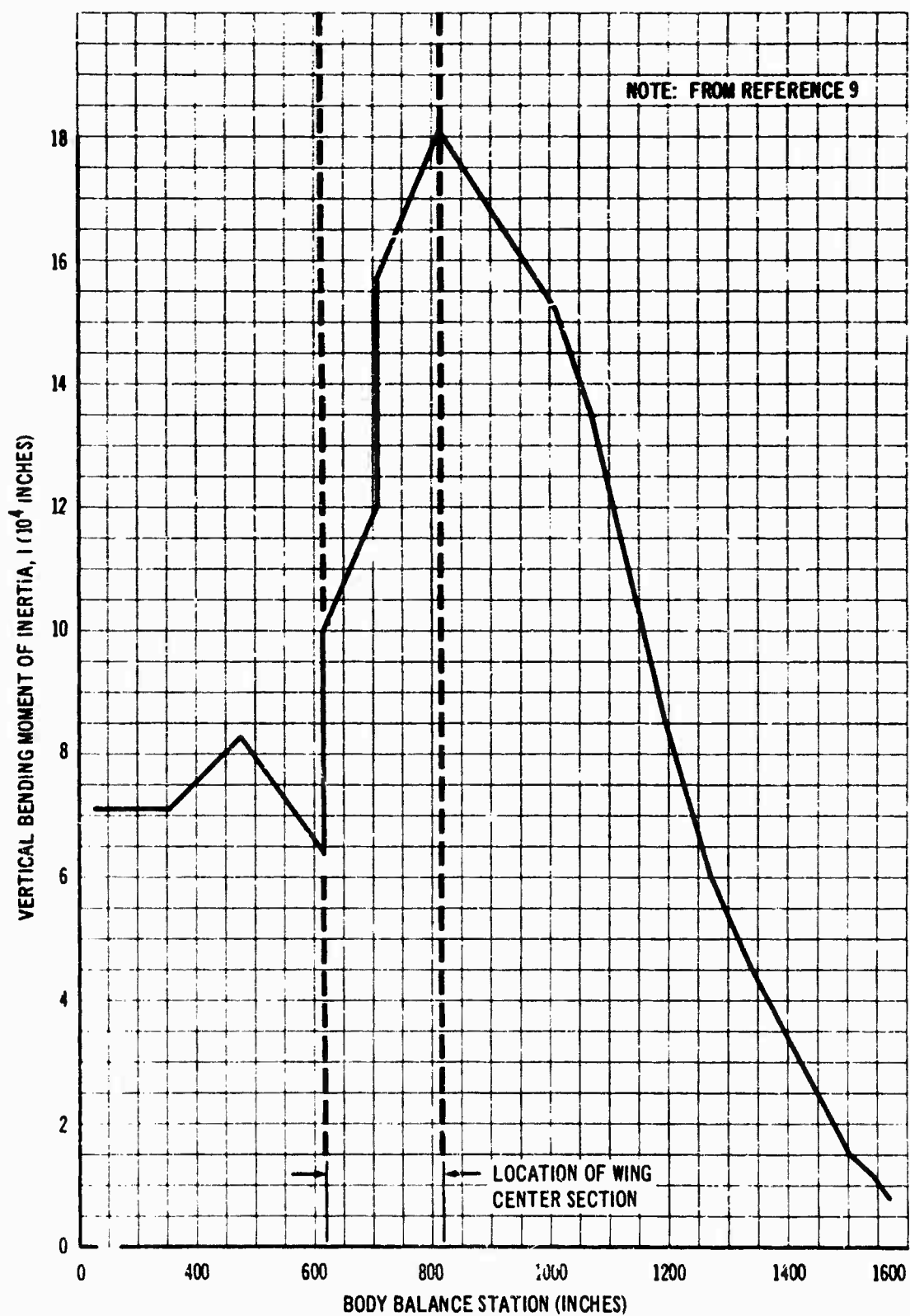


Figure 14. Body Vertical-Bending Section Moment of Inertia

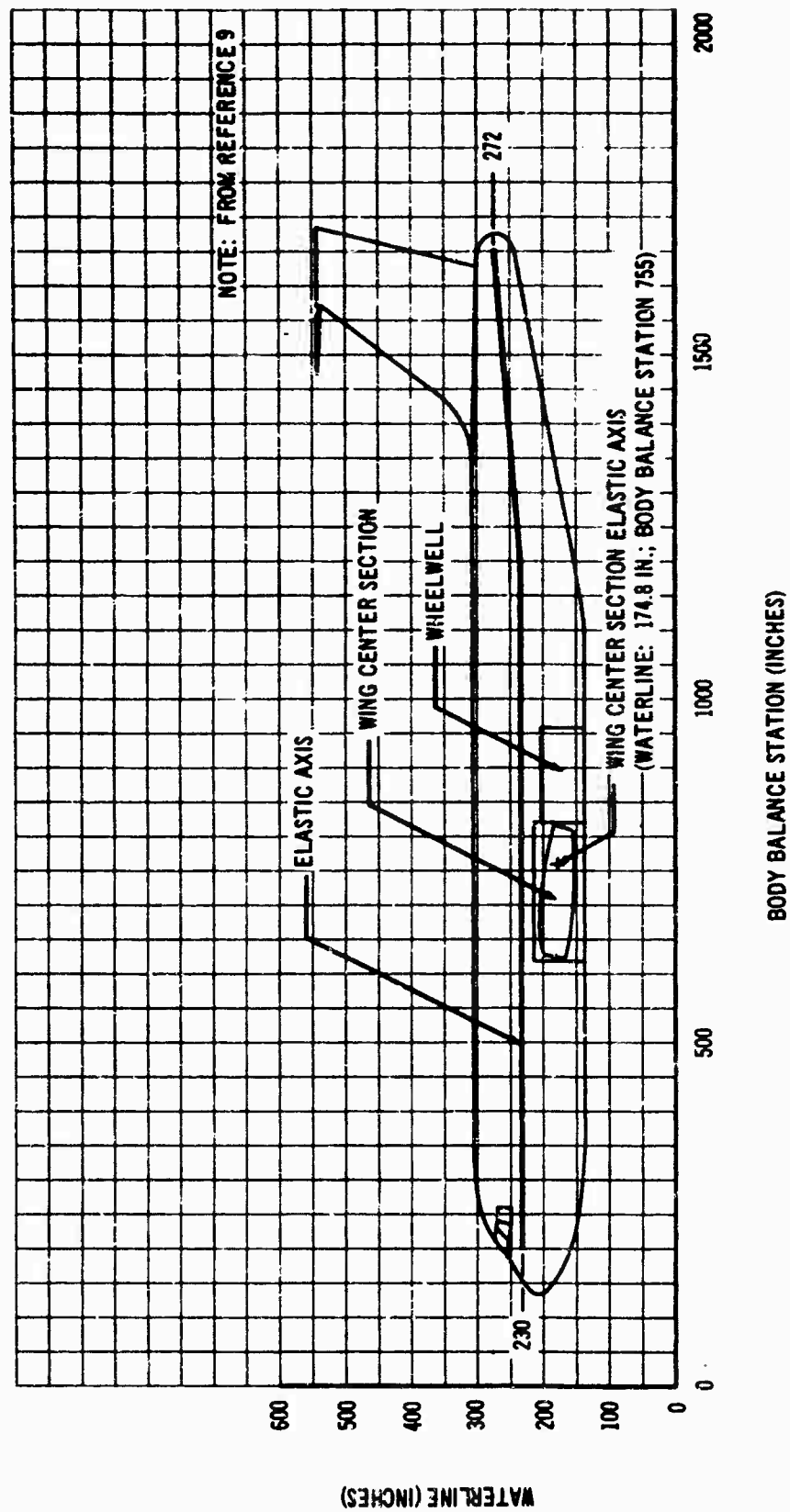
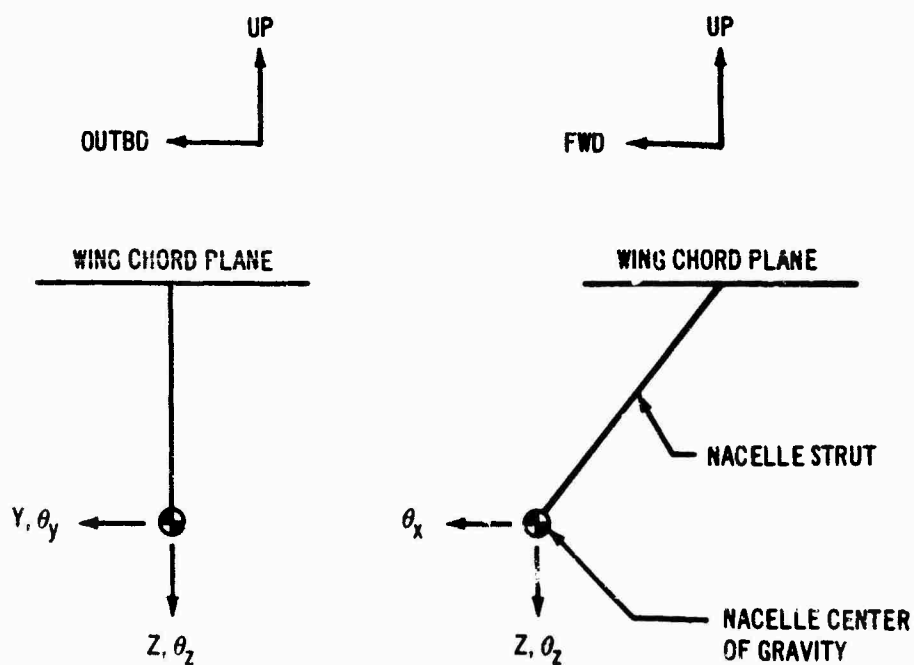


Figure 15. Body Elastic-Axis Location

Table VIII. Nacelle Cantilever Mode Shapes and Frequencies

Location	Vertical bending		Side bending		
	Z (in.)	θ_y (rad.)	Y (in.)	θ_z (rad.)	θ_x (rad.)
MODE SHAPES					
Inboard nacelle	108	-1	1	0.0136	-0.0057
Outboard nacelle	98	-1	1	0.0150	-0.0061
FREQUENCIES (FROM REFERENCE 4)					
Inboard nacelle	4.44 cps		2.31 cps		
Outboard nacelle	4.81 cps		2.50 cps		



APPENDIX III AERODYNAMIC DATA

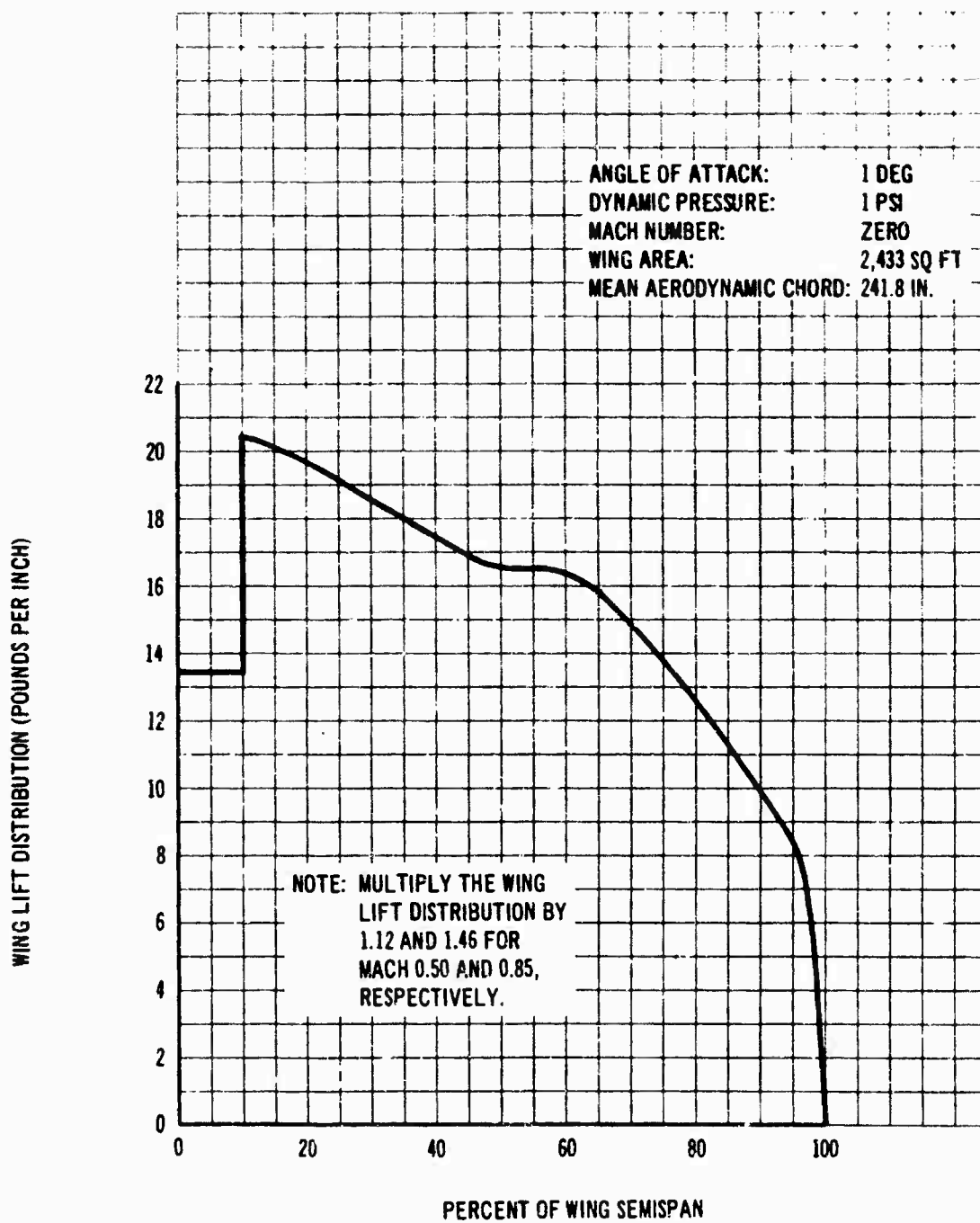


Figure 16. Wing Lift Distribution

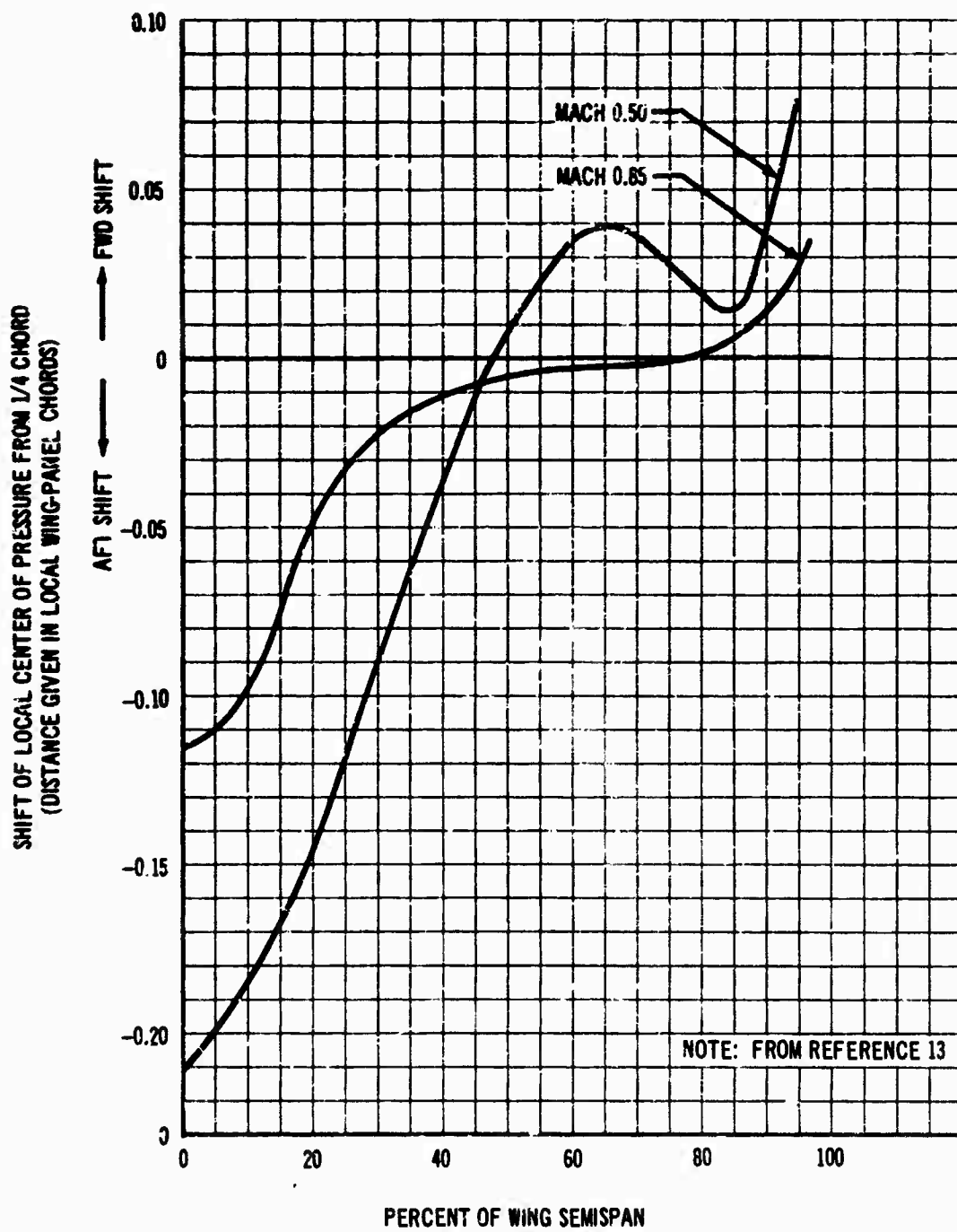


Figure 17. Local Center-of-Pressure Location

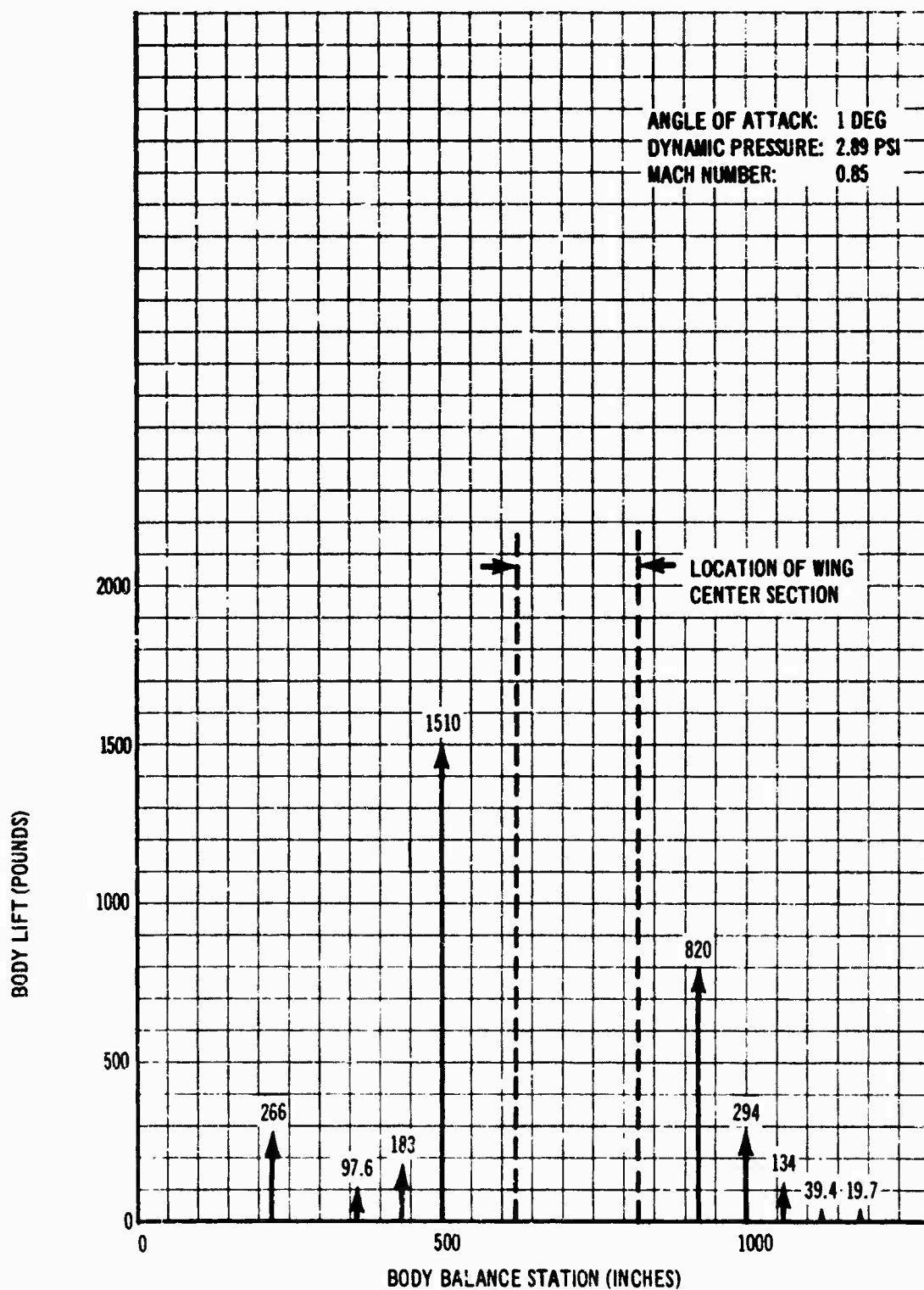


Figure 18. Body Lift Distribution (Mach 0.85)

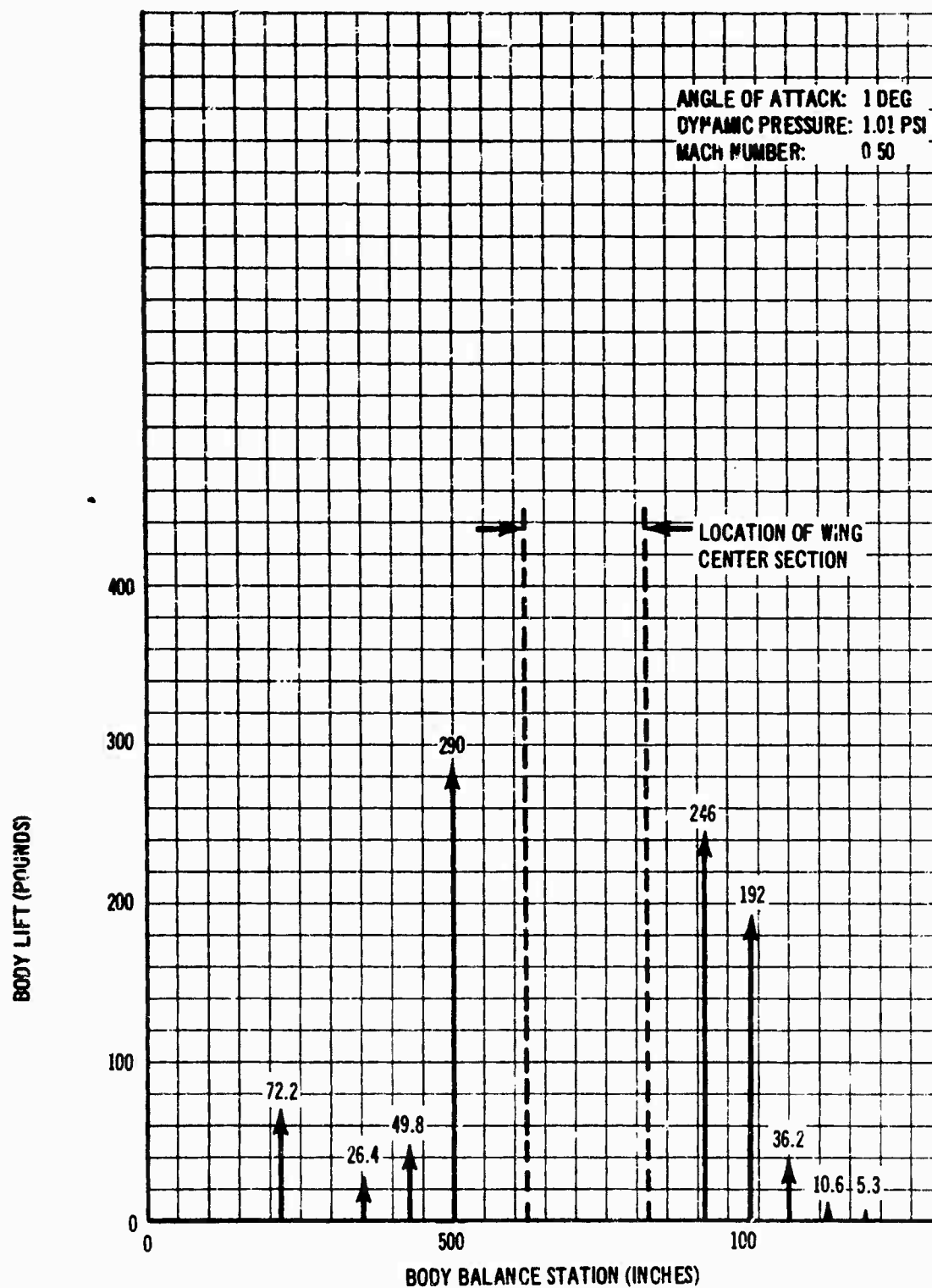


Figure 19. Body Lift Distribution (Mach 0.50)

Table IX. Rigid-Airplane Derivatives $\left(\frac{1}{\text{Radian}}\right)$

Mach number	Analysis		Wind tunnel (from reference 6)	
	$C_{L\alpha}$	$C_{M\alpha}$	$C_{L\alpha}$	$C_{M\alpha}$
0.50	5.06	1.51	5.14	1.50
0.85	6.49	1.68	6.71	1.70

$$L = q s C_{L\alpha} \alpha$$

$$M = q s \bar{c} C_{M\alpha} \alpha$$

L = lift

M = pitching moment about body station 837.9

q = dynamic pressure

s = wing area = 2,433 square feet

α = angle of attack

c = wing mean aerodynamic chord = 241.8 inches

Table X. Rigid-Horizontal-Stabilizer Lift at 24,000-Foot Altitude

Mach number	Lift (lb/rad.)	For flexible horizontal stabilizer, multiply lift by:
0.50	61,068	0.971
0.80	183,156	0.923

Note: Horizontal stabilizer center of lift is at body balance station 1581.3.

APPENDIX IV AIRPLANE FREE-FREE MODE SHAPES

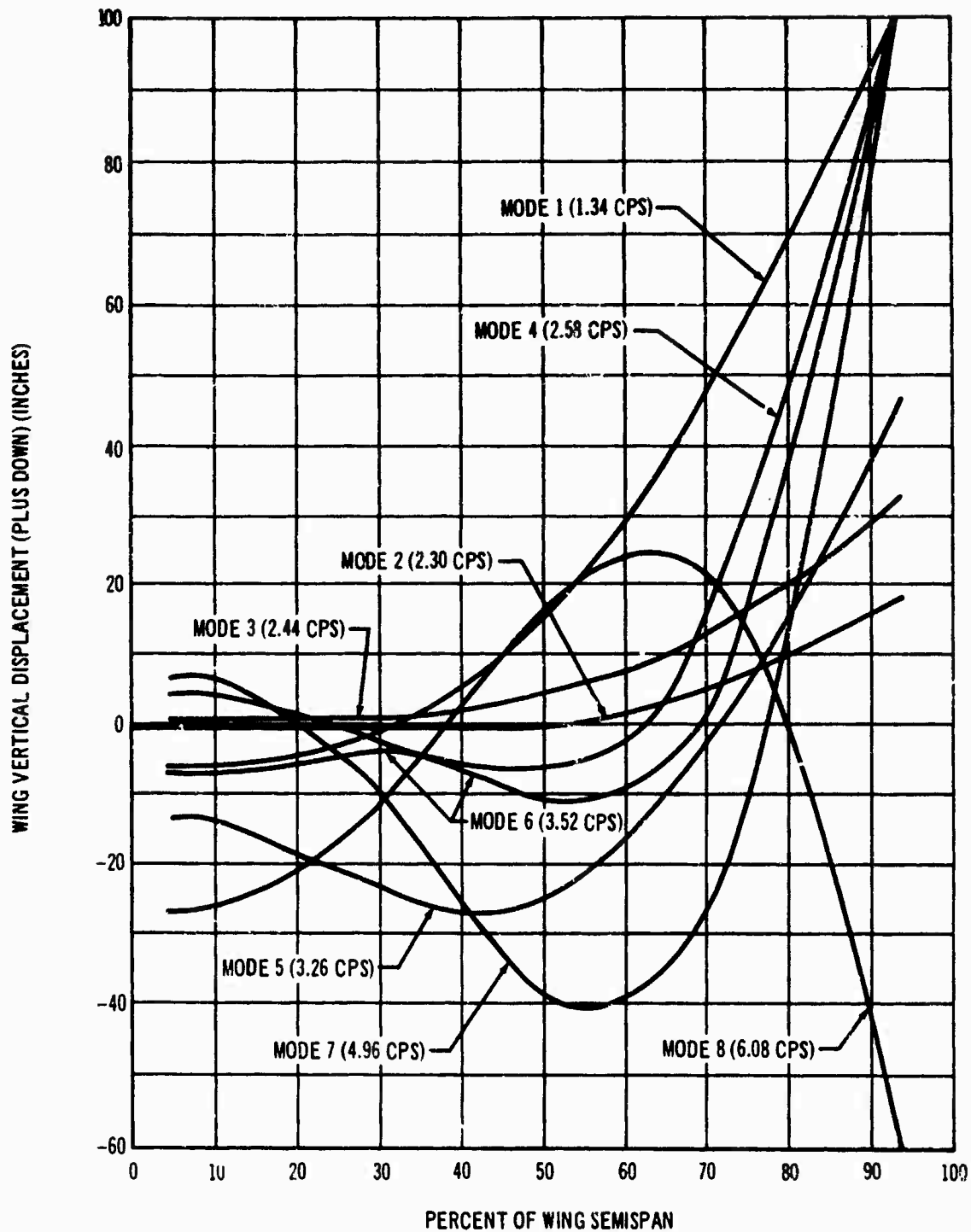


Figure 20. Wing Vertical Displacement in the Normalized Free-Free Airplane Modes; 297,000-Pound Gross Weight (Weight Condition A)

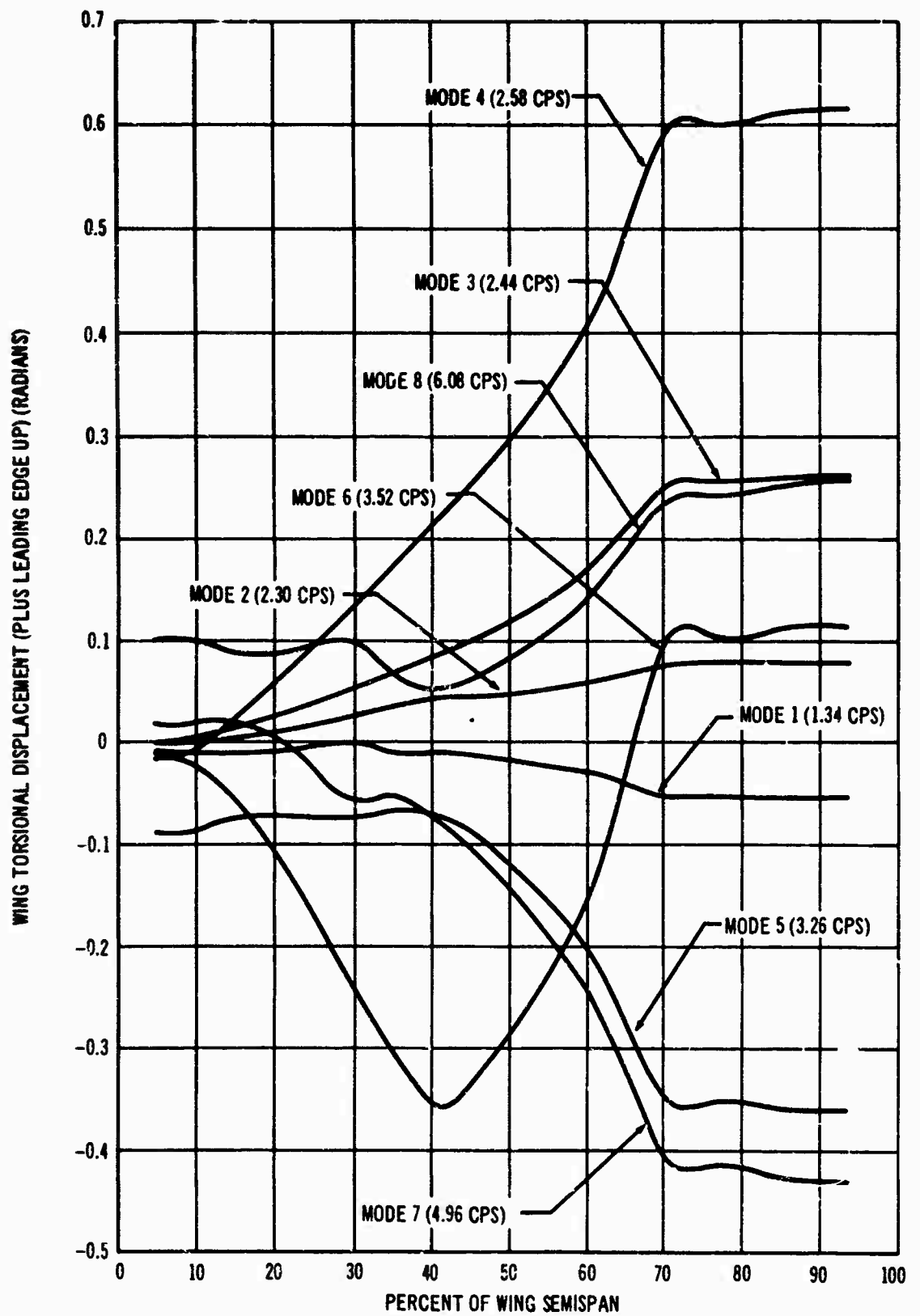


Figure 21. Wing Torsional Displacement in the Normalized Free-Free Airplane Modes; 297,000-Pound Gross Weight (Weight Condition A)

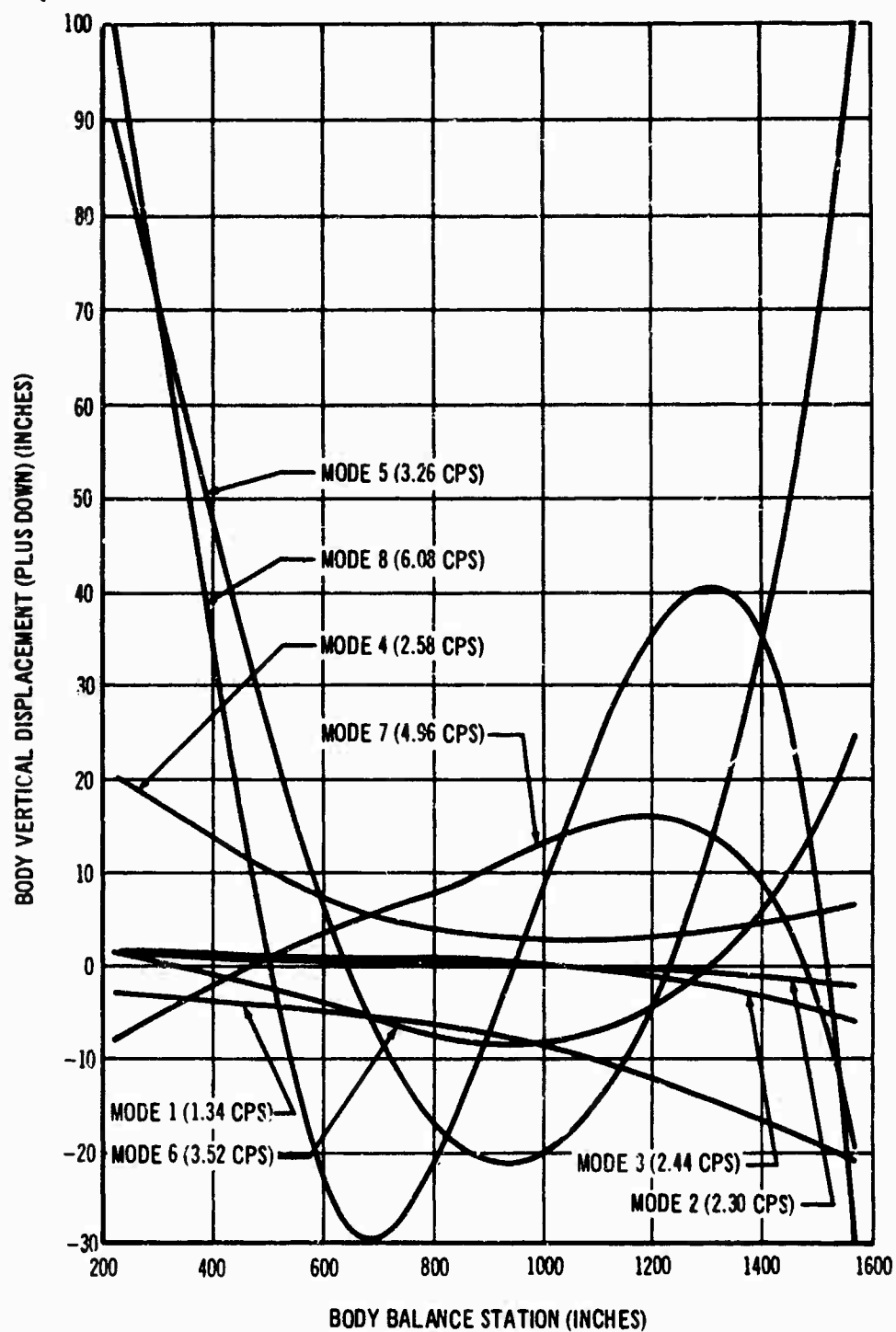


Figure 22. Body Vertical Displacement in the Normalized Free-Free Airplane Modes; 297,000-Pound Gross Weight (Weight Condition A)

Table XI. Nacelle Mode Shapes (Weight Condition A)

Nacelle position	Displacement	Mode number							
		1	2	3	4	5	6	7	8
Inboard	\bar{x}	-1.78	-1.68	-3.89	-8.30	+2.31	+15.20	+7.51	-5.05
	\bar{y}	-5.42	+74.55	-8.49	-18.88	+0.84	+2.72	-0.16	-0.28
	\bar{z}	+0.27	-8.29	-16.25	-51.95	-31.09	+125.88	-6.64	+18.78
	θ_x	+0.0923	-0.4413	+0.0280	+0.0091	+0.0170	+0.0884	-0.0754	+0.0824
	θ_y	+0.0375	+0.0565	+0.1293	+0.3345	+0.0751	-1.0573	-0.1073	-0.2043
	θ_z	-0.0214	+1.0000	-0.1327	-0.3401	+0.0299	+0.1254	-0.0669	+0.0649
Outboard	\bar{x}	-3.37	-3.72	-10.29	-28.16	+4.64	-11.00	+8.47	-0.62
	\bar{y}	-11.32	+1.70	+70.74	-54.94	+12.57	+4.17	+0.98	+0.58
	\bar{z}	+42.33	+6.97	-21.99	-85.85	+41.71	-55.77	+12.70	-3.20
	θ_x	+0.2173	-0.0159	-0.5017	+0.2549	+0.1643	+0.0990	+0.3341	-0.1780
	θ_y	+0.0425	+0.1035	+0.3005	+0.8969	-0.3985	+0.5370	-0.3467	+0.2164
	θ_z	-0.0407	+0.0206	+1.0000	-0.8936	+0.3983	+0.1712	+0.3107	-0.1431

Note: Sign convention for nacelle cg positive displacements

\bar{x} Aft θ_x Roll, bottom inboard
 \bar{y} Outboard θ_y Pitch, nose up
 \bar{z} Down θ_z Yaw, nose outboard

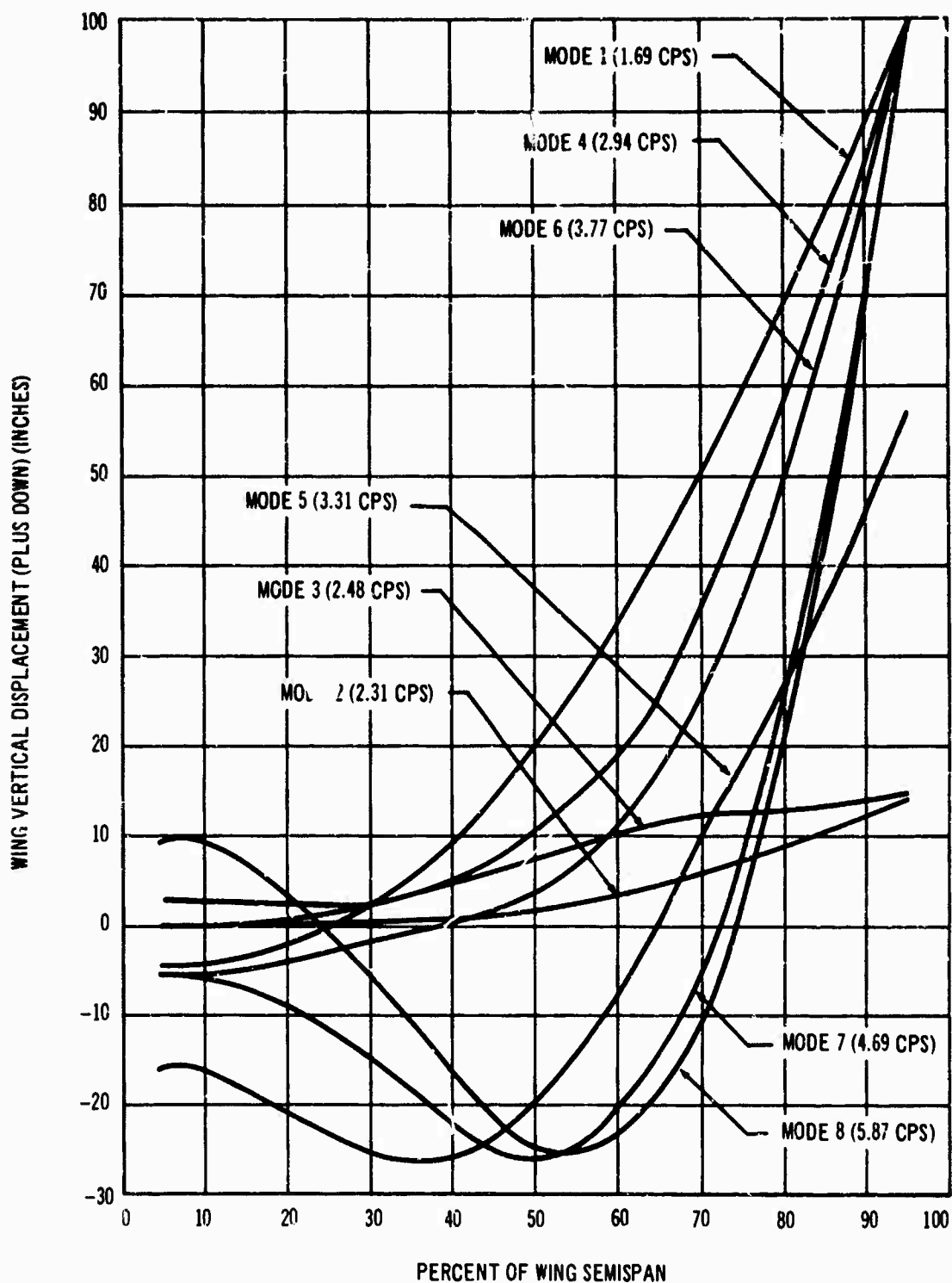


Figure 23. Wing Vertical Displacement in the Normalized Free-Free Airplane Modes; 268,000-Pound Gross Weight (Weight Condition B)

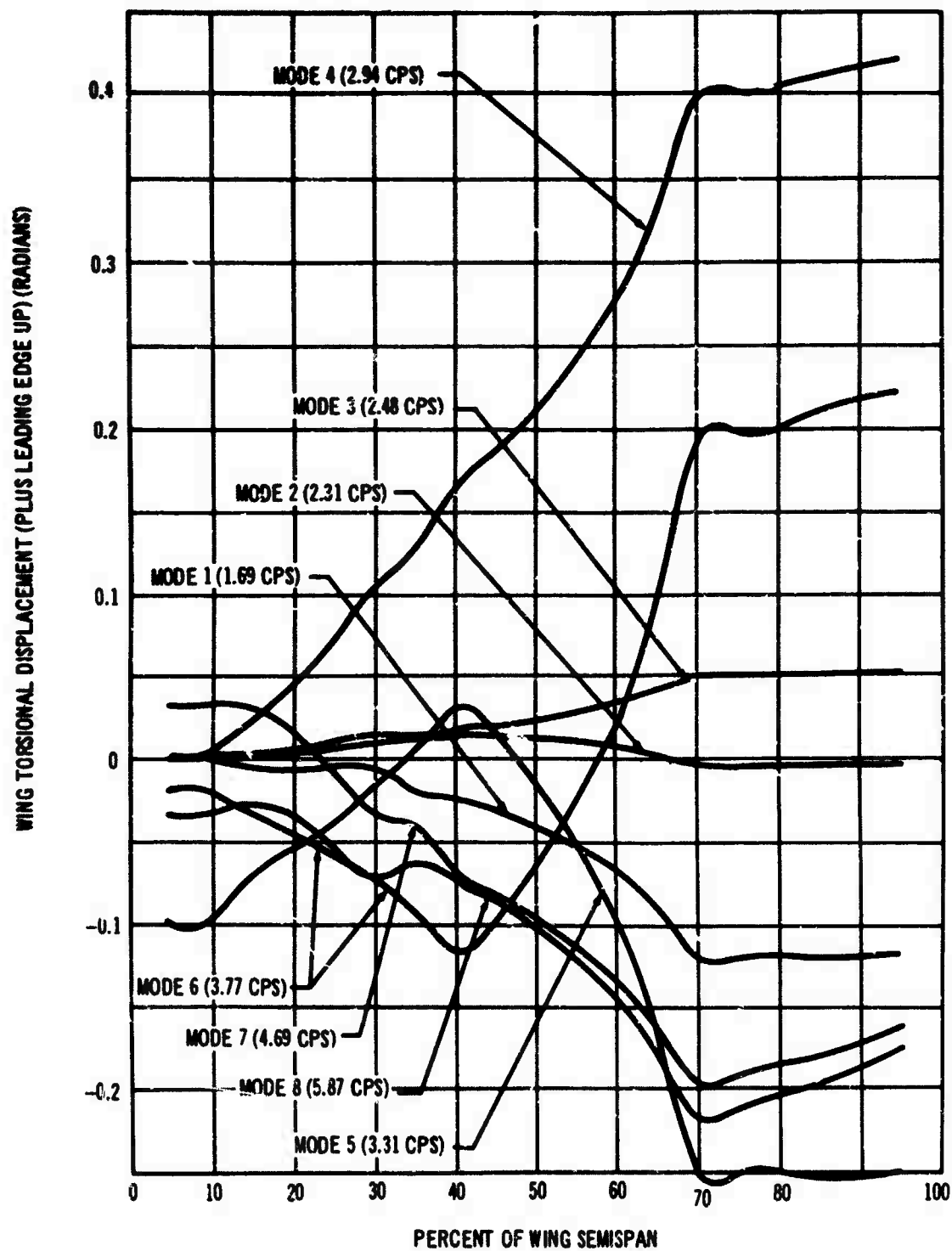


Figure 24. Wing Torsional Displacement in the Normalized Free-Free Airplane Modes; 268,000-Pound Gross Weight (Weight Condition B)

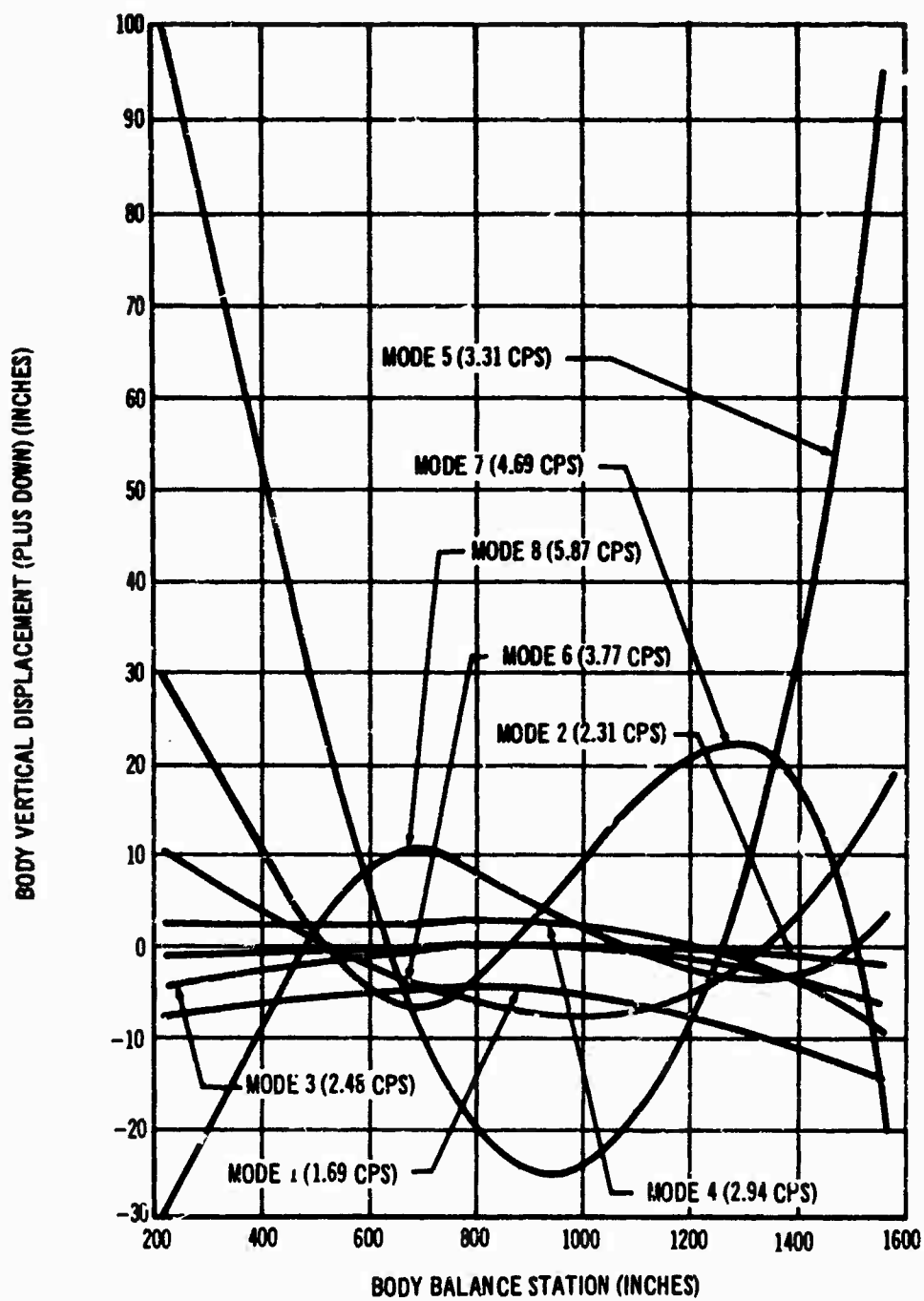


Figure 25. Body Vertical Displacement in the Normalized Free-Free Airplane Modes; 268,000-Pound Gross Weight (Weight Condition B)

Table XII. Nacelle Mode Shapes (Weight Condition B)

Nacelle position	Displacement	Mode number							
		1	2	3	4	5	6	7	8
Inboard	\bar{x}	-1.42	-0.73	-1.41	-7.79	-3.03	+3.82	+4.94	+5.54
	\bar{y}	-8.81	+73.67	+3.84	-2.47	+0.38	+1.12	+0.04	+0.22
	\bar{z}	+5.77	-2.51	-0.97	-39.67	-70.28	+51.44	+3.75	-5.20
	θ_x	+0.1234	-0.4220	-0.0095	-0.0217	+0.0084	+0.0541	-0.0174	-0.0462
	θ_y	+0.0248	+0.0225	+0.0353	+0.3295	+0.3905	-0.4251	-0.1930	-0.0489
	θ_z	-0.0578	+1.0000	+0.0629	-0.0641	+0.0141	+0.0667	-0.0139	-0.0354
Outboard	\bar{x}	-0.19	-0.56	-1.76	-19.06	+0.64	-13.20	+2.21	+0.51
	\bar{y}	-15.85	-6.20	+67.73	-3.85	+9.75	+1.29	-0.60	-1.11
	\bar{z}	+57.66	+5.46	+8.93	-29.74	+45.09	-26.40	+3.84	+3.04
	θ_x	+0.2614	+0.0571	-0.4315	-0.0129	+0.1461	+0.0487	+0.2417	+0.2426
	θ_y	-0.0576	+0.0029	+0.0251	+0.5765	-0.3250	+0.4707	-0.0855	-0.1253
	θ_z	-0.0944	-0.0763	+1.0000	-0.0890	+0.3251	+0.0688	+0.1982	+0.1896

Note: Sign convention for nacelle cg positive displacements

\bar{x} Aft θ_x Roll, bottom inboard
 \bar{y} Outboard θ_y Pitch, nose up
 \bar{z} Down θ_z Yaw, nose outboard

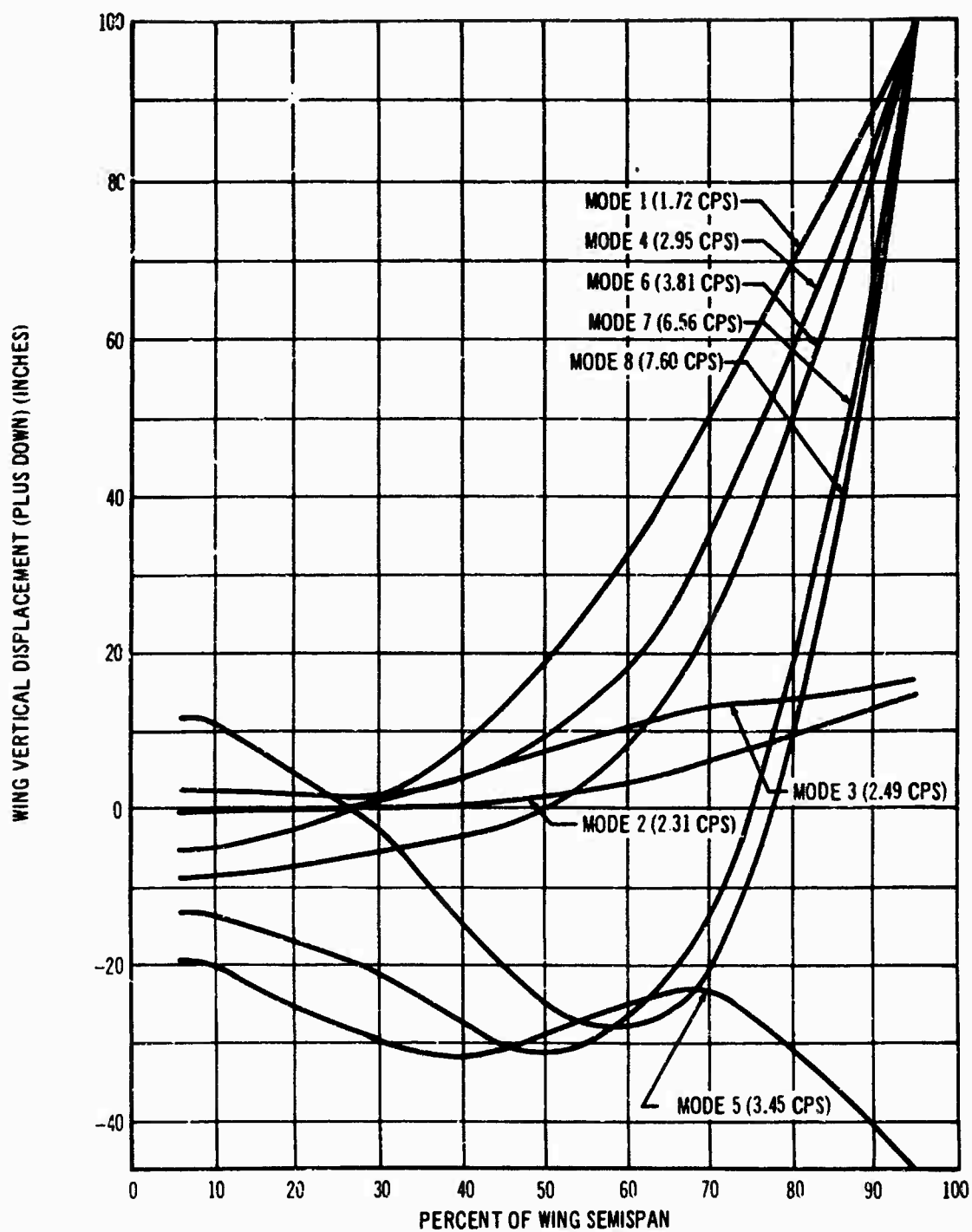


Figure 26. Wing Vertical Displacement in the Normalized Free-Free Airplane Modes; 190,590-Pound Gross Weight (Weight Condition C)

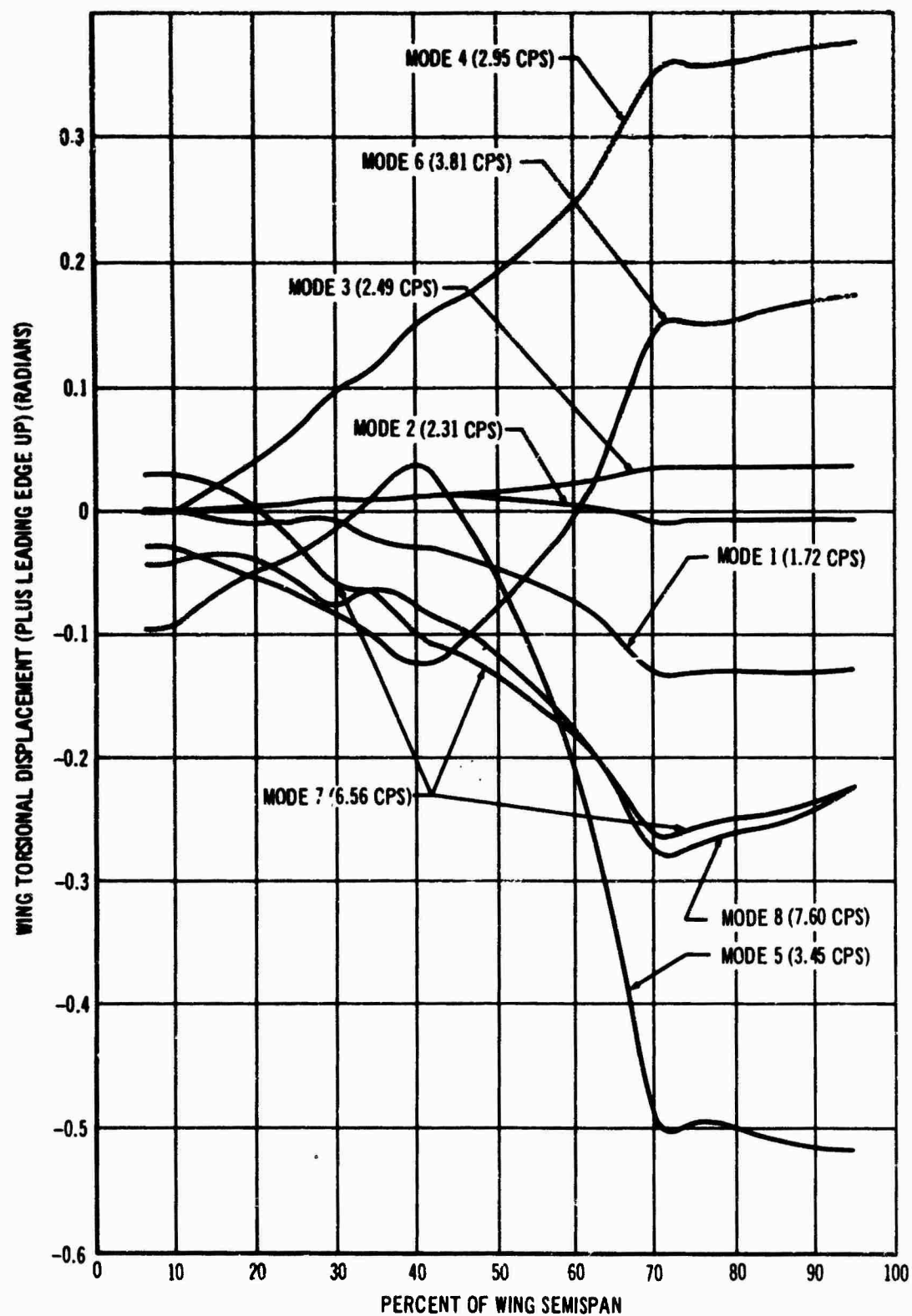


Figure 27. Wing Torsional Displacement in the Normalized Free-Free Airplane Modes; 190,590-Pound Gross Weight (Weight Condition C)

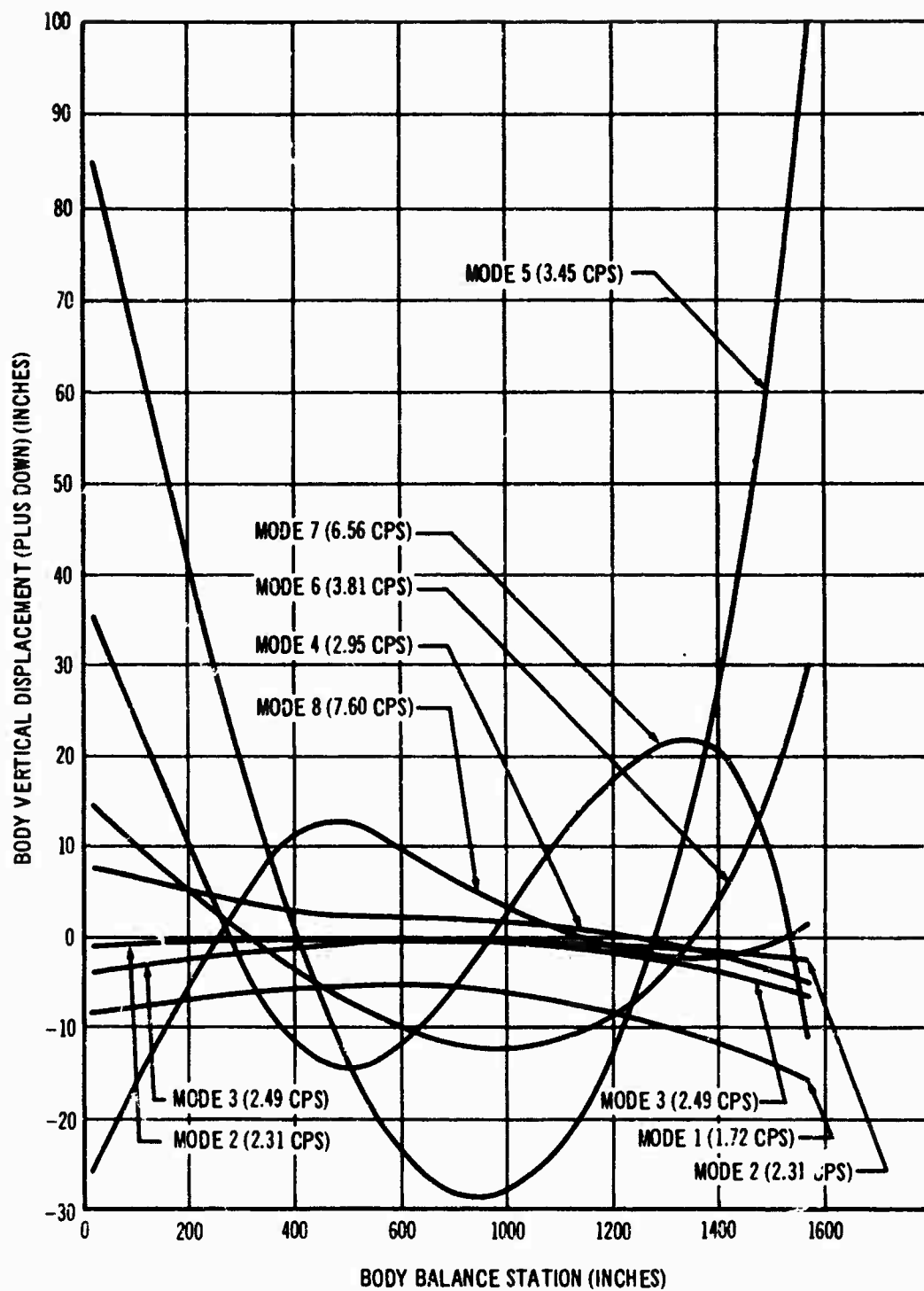


Figure 28. Body Vertical Displacement in the Normalized Free-Free Airplane Modes; 190,590-Pound Gross Weight (Weight Condition C)

Table XIII. Nacelle Mode Shapes (Weight Condition C)

Nacelle position	Displacement	Mode number							
		1	2	3	4	5	6	7	8
Inboard	\bar{x}	-1.28	-0.72	-1.25	-7.34	-2.69	+4.01	+5.92	+5.88
	\bar{y}	-9.21	-73.66	+4.31	-2.15	-0.18	+1.10	ZERO	+0.35
	\bar{z}	+5.35	-2.51	-0.31	-38.49	-90.38	+45.24	+1.88	-4.77
	θ_x	+0.1256	-0.4218	-0.0100	-0.0195	-0.0053	+0.0570	ZERO	-0.0530
	θ_y	+0.0219	+0.0222	+0.0298	+0.3146	+0.5241	-0.3998	-0.2097	-0.0338
	θ_z	-0.0632	+1.0000	+0.0709	-0.0561	-0.0079	+0.0687	-0.0001	-0.0386
Outboard	\bar{x}	+0.04	-0.53	-1.37	-17.78	+14.83	-12.19	+4.54	+3.14
	\bar{y}	-16.83	-6.91	+67.23	-1.85	+6.36	+1.68	-1.26	-1.68
	\bar{z}	+57.98	+5.93	+11.59	-23.53	+62.89	-21.60	+1.54	+0.51
	θ_x	+0.2724	+0.0636	-0.4198	-0.0065	+0.1306	+0.0688	+0.2679	+0.2479
	θ_y	-0.0665	+0.0010	+0.0081	+0.5188	-0.7789	+0.4108	-0.1317	-0.1838
	θ_z	-0.1049	-0.0849	+1.0000	-0.0430	+0.2427	+0.0944	+0.2075	+0.1816

Note: Sign convention for nacelle cg positive displacements

\bar{x} Aft	θ_x Roll, bottom inboard
\bar{y} Outboard	θ_y Pitch, nose up
\bar{z} Down	θ_z Yaw, nose outboard

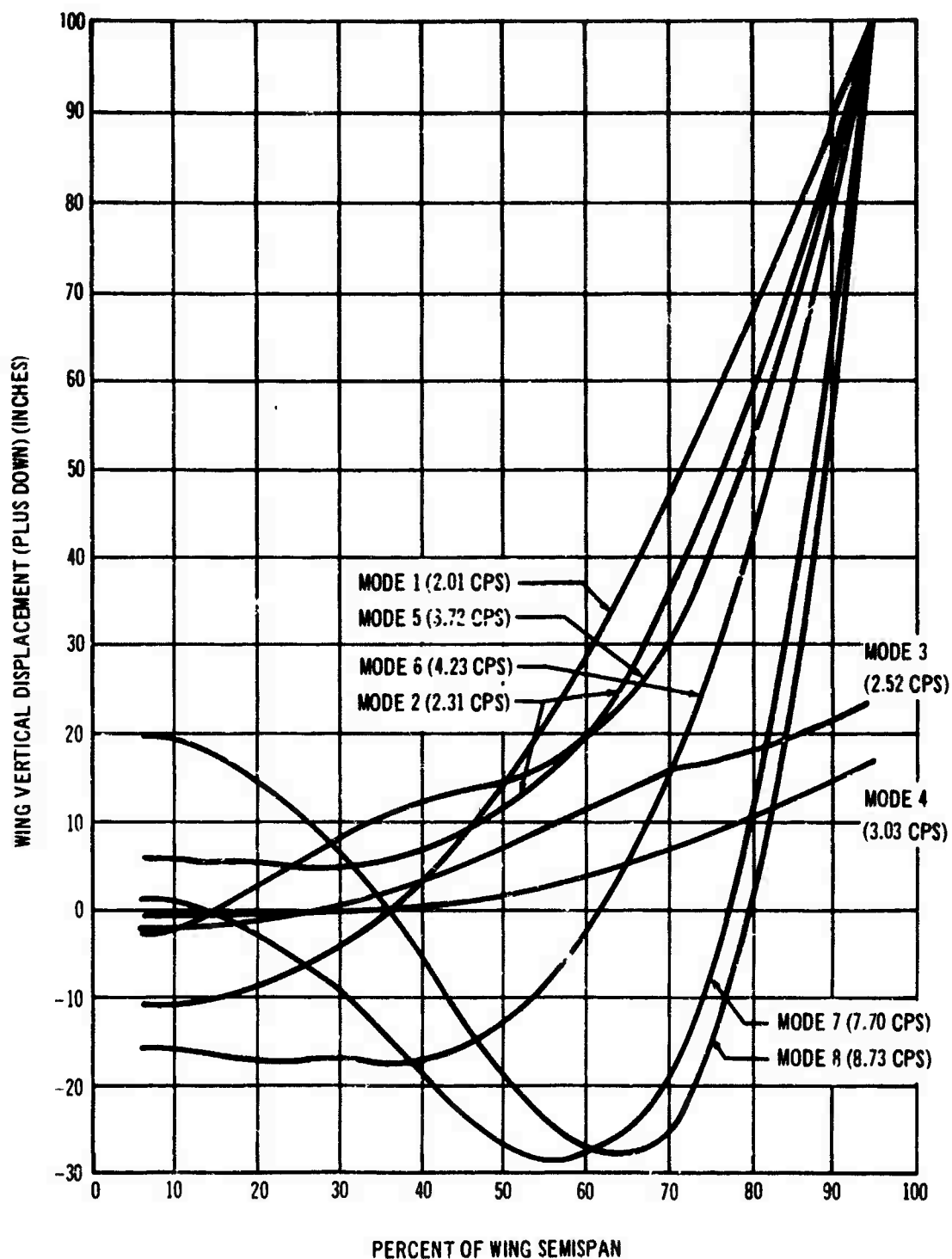


Figure 29. Wing Vertical Displacement in the Normalized Free-Free Airplane Modes; 107,260-Pound Gross Weight (Weight Condition D)

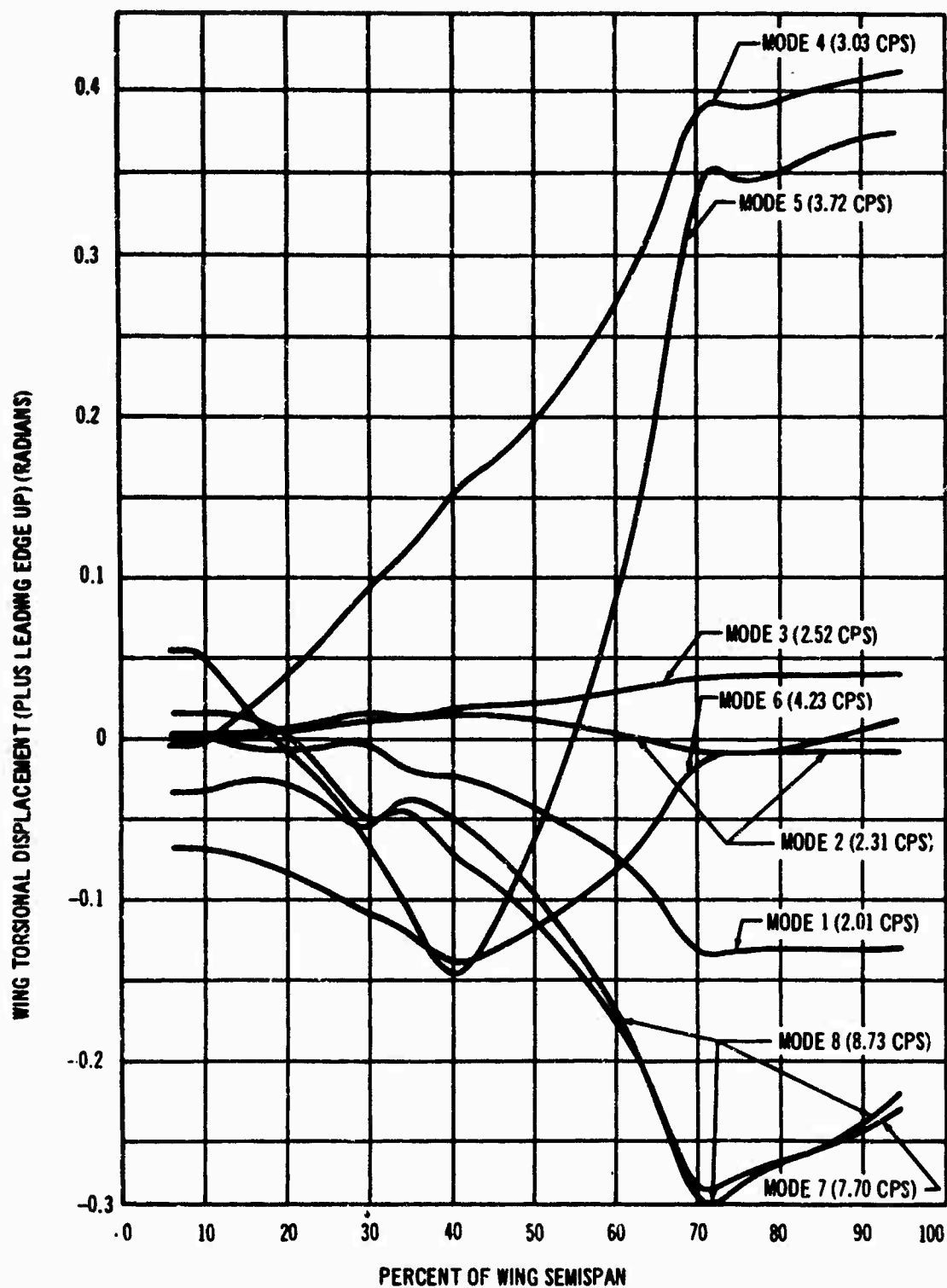


Figure 30. Wing Torsional Displacement in the Normalized Free-Free Airplane Modes; 107,260-Pound Gross Weight (Weight Condition D)

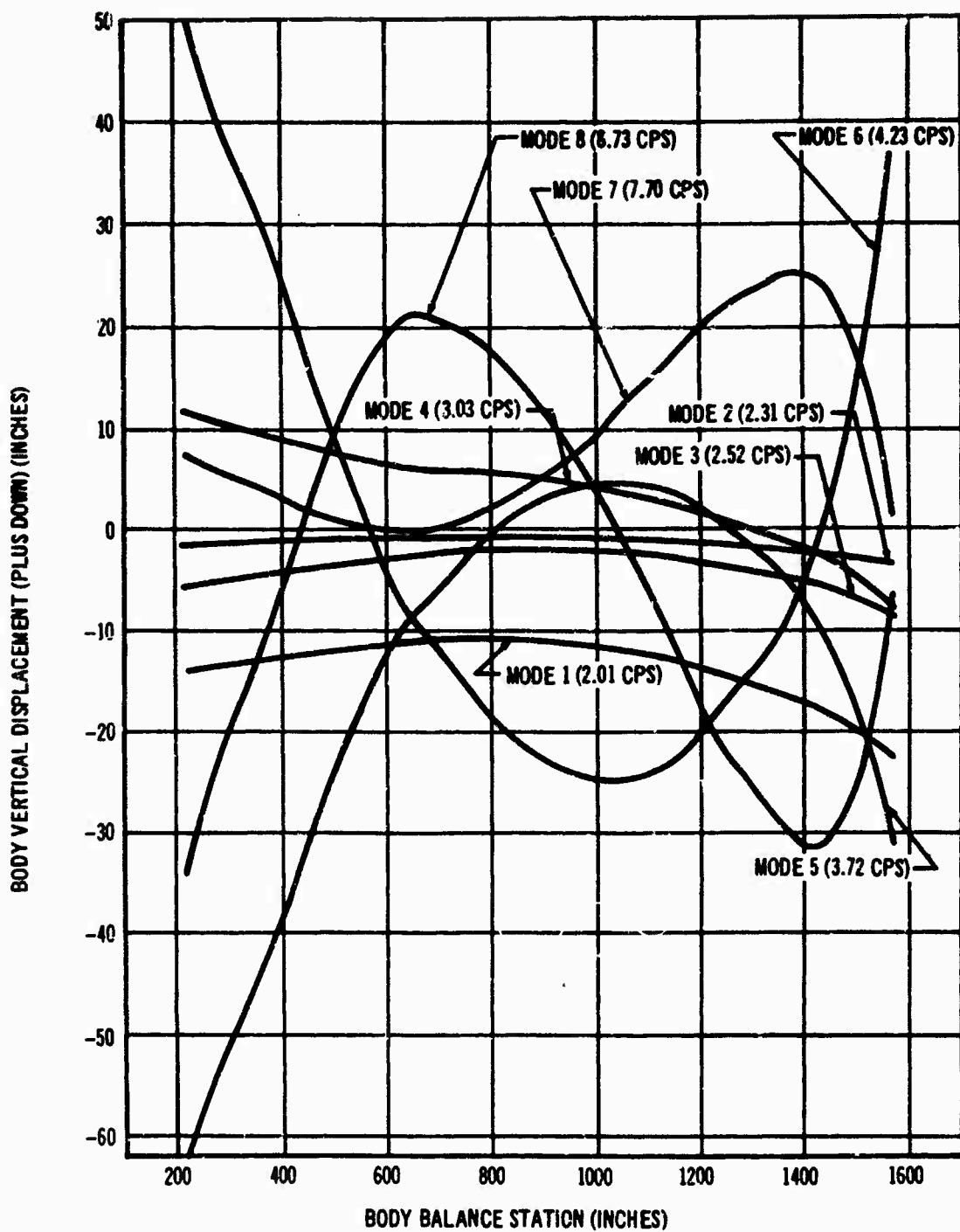


Figure 31. Body Vertical Displacement in the Normalized Free-Free Airplane Modes; 107,260-Pound Gross Weight (Weight Condition D)

Table XIV. Nacelle Mode Shapes (Weight Condition D)

Nacelle position	Displacement	Mode number							
		1	2	3	4	5	6	7	8
Inboard	\bar{x}	-1.53	-0.79	-1.64	-7.12	+5.13	+5.05	+5.54	+5.79
	\bar{y}	-10.75	+73.58	+4.77	-2.22	+1.48	+0.66	+0.25	+0.59
	\bar{z}	-1.92	-3.27	-3.52	-33.41	+94.06	+21.32	-2.44	-5.21
	θ_x	+0.1351	-0.4204	-0.0103	-0.0231	+0.0622	+0.0611	-0.0393	-0.0778
	θ_y	+0.0366	+0.0251	+0.0465	+0.2945	-0.6963	-0.2944	-0.0972	+0.0486
	θ_z	-0.0833	+1.0000	+0.0793	-0.0604	+0.0801	+0.0639	-0.0288	-0.0552
Outboard	\bar{x}	-0.16	-0.57	-1.84	-18.93	-15.69	-7.66	+5.19	+5.52
	\bar{y}	-19.48	-8.26	+66.64	-3.14	-0.43	+2.00	-1.66	-1.75
	\bar{z}	+54.51	+6.54	+13.17	-28.40	-47.22	-5.98	+0.48	-1.07
	θ_x	+0.2969	+0.0759	-0.4062	-0.0146	-0.0133	+0.1489	+0.2558	+0.2235
	θ_y	-0.0653	+0.0004	+0.0144	+0.5663	+0.7015	+0.1928	-0.1739	-0.2063
	θ_z	-0.1371	-0.1016	+1.0000	-0.0763	-0.0202	+0.1700	+0.1889	+0.1589

Note: Sign convention for nacelle cg positive displacements

\bar{x} Aft θ_x Roll, bottom inboard
 \bar{y} Outboard θ_y Pitch, nose up
 \bar{z} Down θ_z Yaw, nose outboard

APPENDIX V **STRESS FREQUENCY RESPONSE FUNCTIONS**

Table XV Stress Frequency Response Functions (Analysis Condition 1)

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN: 27 SEGMENT NUMBER: 10

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY
REAL	IMAGINARY	REAL	IMAGINARY			
0.84721E-01	0.35385E-02	-0.60681E-00	0.30363E-03	0.	-0.	0.75
0.24347E-02	0.29947E-02	0.19898E-03	0.26210E-03	-0.	-0.	0.76
0.44137E-02	0.83697E-01	0.37670E-03	0.76906E-02	-0.	-0.	0.77
0.45393E-02	-0.51332E-01	0.47339E-03	-0.76261E-02	-0.	0.	0.78
0.53094E-02	-0.16505E-02	0.45739E-03	-0.14192E-03	-0.	0.	0.79
0.46190E-02	-0.22634E-02	0.40073E-03	-0.19746E-03	-0.	0.	0.80
0.41253E-02	-0.27016E-02	0.35800E-03	-0.24696E-03	-0.	0.	0.81
0.38231E-02	-0.31773E-02	0.32986E-03	-0.28530E-03	-0.	0.	0.82
0.36571E-02	-0.37815E-02	0.31144E-03	-0.33932E-03	-0.	0.	0.83
0.35926E-02	-0.44953E-02	0.29597E-03	-0.41720E-03	-0.	0.	1.00
0.35653E-02	-0.57188E-02	0.27761E-03	-0.60276E-03	-0.	0.	1.20
0.35495E-02	-0.12897E-03	0.20461E-03	-0.10236E-04	0.	0.	1.30
0.22848E-02	-0.16771E-03	0.96340E-02	-0.12780E-04	-0.	-0.	1.40
-0.42896E-01	-0.18946E-03	-0.14204E-03	-0.14050E-04	0.	-0.	1.50
-0.32143E-02	-0.70625E-03	-0.36351E-03	-0.14789E-04	0.	-0.	1.60
-0.75685E-03	-0.17111E-03	-0.69482E-03	-0.10976E-04	0.	-0.	1.70
-0.19911E-03	-0.35902E-02	-0.13332E-04	-0.10140E-03	-0.	-0.	1.80
-0.23925E-03	0.46642E-02	-0.16642E-04	0.40830E-03	-0.	0.	1.90
-0.18247E-03	0.70084E-02	-0.11743E-04	0.40670E-03	-0.	0.	2.00
-0.70840E-02	0.64637E-02	-0.36373E-03	0.30779E-03	-0.	0.	2.10
-0.45108E-02	0.62749E-02	-0.20150E-03	0.23180E-03	-0.	0.	2.20
-0.30738E-02	0.63716E-02	-0.12039E-03	0.17513E-03	-0.	0.	2.30
-0.20436E-02	0.65980E-02	-0.77273E-02	0.12793E-03	-0.	0.	2.40
-0.94218E-01	0.74699E-02	-0.54149E-02	0.67179E-02	-0.	0.	2.50
-0.14082E-02	0.70093E-02	-0.52018E-02	0.70001E-02	0.	0.	2.60
-0.17211E-02	0.77041E-02	-0.52613E-02	0.46193E-02	0.	0.	2.70
-0.24472E-02	0.79877E-02	-0.63530E-02	0.36245E-02	0.	0.	2.80
-0.34061E-02	0.79724E-02	-0.85646E-02	0.35754E-02	0.	0.	2.90
-0.39009E-02	0.72921E-02	-0.97472E-02	0.36486E-02	0.	0.	3.00
-0.50533E-02	0.63392E-02	-0.12910E-03	0.10032E-03	0.	0.	3.10
-0.50381E-02	0.69316E-02	-0.12646E-03	0.11476E-03	0.	0.	3.20
-0.45535E-02	0.84011E-02	-0.84240E-02	0.97083E-02	0.	0.	3.30
-0.54613E-02	0.10597E-03	-0.63312E-02	0.66091E-02	0.	0.	3.40
-0.10102E-03	0.10494E-03	-0.68845E-02	0.56672E-02	0.	0.	3.50
-0.16744E-03	-0.10530E-03	-0.96249E-02	0.14603E-03	-0.	-0.	3.60
-0.29234E-03	-0.16149E-03	-0.14615E-03	0.14327E-03	0.	-0.	3.70
-0.15204E-03	-0.11812E-03	-0.16352E-02	0.11391E-03	-0.	-0.	3.80
-0.56137E-02	-0.93940E-02	0.26914E-02	0.96735E-02	-0.	-0.	3.90
-0.71372E-02	-0.85784E-02	0.30791E-02	0.90310E-02	-0.	-0.	4.00
-0.81036E-02	-0.83382E-02	0.33323E-02	0.87509E-02	-0.	-0.	4.10
-0.88238E-02	-0.82515E-02	0.36221E-02	0.86883E-02	-0.	-0.	4.20
-0.10972E-03	-0.71410E-02	0.43080E-02	0.82441E-02	-0.	-0.	4.30
-0.15204E-03	0.69707E-02	0.53823E-02	0.43047E-02	-0.	-0.	4.40
-0.20169E-03	0.16767E-03	0.10323E-02	0.61216E-02	-0.	0.	4.50
-0.74405E-03	0.21643E-03	0.47720E-01	0.77443E-02	-0.	0.	4.60
-0.70355E-02	0.97863E-02	0.14542E-02	0.65131E-02	-0.	0.	4.70
-0.75312E-02	0.12316E-02	0.47708E-02	0.42110E-02	0.	0.	4.80
-0.47724E-02	-0.54085E-01	0.47620E-02	0.32363E-02	0.	-0.	4.90
-0.24912E-02	-0.10415E-02	0.44214E-02	0.25349E-02	-0.	-0.	5.00
-0.10327E-02	-0.10380E-02	0.42629E-02	0.18693E-02	0.	-0.	5.10
-0.18707E-00	-0.97066E-01	0.47327E-02	0.19688E-02	-0.	-0.	5.20
-0.35289E-01	-0.84821E-01	0.60177E-02	0.28725E-01	-0.	-0.	5.30
-0.49824E-01	-0.67778E-01	0.73033E-02	-0.33319E-02	-0.	0.	5.40
-0.64981E-01	-0.61227E-01	0.95124E-02	-0.82493E-02	-0.	0.	5.50
-0.72581E-01	-0.49639E-01	0.84297E-02	-0.85831E-02	-0.	0.	5.60
-0.70801E-01	-0.46116E-01	-0.17810E-02	-0.36016E-02	0.	0.	5.70
-0.78154E-01	-0.37278E-01	-0.30270E-02	-0.13876E-02	0.	0.	5.80
-0.91329E-01	-0.25388E-01	-0.22972E-02	-0.77197E-01	-0.	-0.	5.90
-0.10893E-01	-0.11493E-01	-0.20631E-02	-0.36687E-01	-0.	-0.	6.00
-0.13055E-02	0.38635E-01	-0.23939E-02	0.10126E-02	-0.	-0.	6.10
-0.17386E-02	0.60353E-01	-0.35203E-02	0.16962E-02	-0.	-0.	6.20
-0.18059E-02	0.89105E-01	-0.37039E-02	0.23549E-02	-0.	0.	6.30
-0.18167E-02	0.12317E-02	-0.37163E-02	0.33800E-02	-0.	0.	6.40
-0.17110E-02	0.13721E-02	-0.33713E-02	0.38920E-02	-0.	0.	6.50
-0.20813E-01	0.49234E-01	0.13415E-02	0.93671E-01	-0.	0.	6.60
-0.16308E-01	0.36369E-01	0.13748E-02	0.31734E-01	-0.	0.	6.70
-0.27608E-01	0.38199E-01	0.11146E-02	0.13424E-00	-0.	0.	6.80
-0.32464E-01	0.63904E-01	0.73713E-01	-0.66774E-00	-0.	0.	6.90
-0.28733E-01	0.51455E-01	0.48944E-01	-0.17366E-01	-0.	0.	7.00
-0.11105E-01	0.48479E-01	0.42603E-01	-0.22399E-01	-0.	0.	7.10
-0.81622E-00	0.37366E-01	0.33497E-01	-0.28373E-01	-0.	0.	7.20
-0.76289E-01	0.	0.22131E-01	0.	0.	0.	7.30

Table XV --- Continued

(PSI/PPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CFS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMI SPAN: 27 SEGMENT NUMBER 14

INCIDENTAL BEND STRESS		INCIDENTAL AXIAL STRESS				FREQUENCY CFS
REAL	IMAGINARY	REAL	IMAGINARY			
0.62943E-02	0.10709E 03	-0.73216E 00	0.27999E 03	0.	-0.	0.25
0.72153E 02	0.71324E 02	0.18057E 03	0.25705E 03	-0.	-0.	0.30
0.13203E 03	0.26474E 02	0.33594E 03	0.71605E 02	-0.	-0.	0.35
0.14474E 03	-0.14404E 02	0.42999E 03	-0.35629E 07	-0.	0.	0.40
0.14010E 03	-0.49190E 02	0.41525E 03	-0.12079E 03	-0.	0.	0.45
0.19927E 03	-0.07313E 02	0.36345E 03	-0.17921E 05	-0.	0.	0.50
0.12590E 03	-0.01121E 02	0.32400E 03	-0.21864E 03	-0.	0.	0.55
0.11414E 03	-0.09111E 02	0.29934E 03	-0.25091E 03	-0.	0.	0.60
0.10607E 03	-0.11235E 03	0.28203E 03	-0.30010E 03	-0.	0.	0.65
0.10451E 03	-0.17053E 03	0.27131E 03	-0.44093E 03	-0.	0.	0.70
0.10109E 03	-0.26007E 07	0.25192E 03	-0.72640E 03	-0.	0.	0.75
0.09405E 02	-0.34409E 05	0.19022E 03	-0.93049E 03	0.	0.	0.80
0.52699E 02	-0.43077E 03	0.07427E 02	-0.11307E 04	0.	-0.	0.85
-0.22229E 02	-0.48954E 05	-0.12090E 03	-0.12750E 04	0.	-0.	0.90
-0.04435E 02	-0.52411E 03	-0.33109E 03	-0.15421E 04	0.	-0.	0.95
-0.20717E 03	-0.41390E 03	-0.63053E 03	-0.09007E 03	0.	-0.	1.00
-0.50773E 03	-0.74567E 02	-0.13014E 04	-0.92016E 02	-0.	-0.	1.05
-0.58304E 03	0.11749E 03	-0.15120E 04	0.37053E 03	-0.	0.	1.10
-0.42034E 03	0.14750E 03	-0.10650E 04	0.37009E 03	-0.	0.	1.15
-0.14004E 03	0.12261E 03	-0.33008E 03	0.27932E 03	-0.	0.	1.20
-0.08042E 02	0.10529E 03	-0.16206E 03	0.21035E 03	-0.	0.	1.25
-0.55979E 02	0.05527E 02	-0.10044E 03	0.15093E 03	-0.	0.	1.30
-0.55901E 02	0.02220E 02	-0.70124E 02	0.11611E 03	-0.	0.	1.35
-0.19527E 02	0.00066E 02	-0.49139E 02	0.79113E 02	-0.	0.	1.40
0.49824E 01	0.00290E 02	-0.47205E 02	0.63524E 02	0.	0.	1.45
0.02011E 01	0.01072E 02	-0.47745E 02	0.41919E 02	0.	0.	1.50
0.15072E 02	0.02053E 02	-0.59067E 02	0.32091E 02	0.	0.	1.55
0.17070E 02	0.01099E 02	-0.77721E 02	0.32446E 02	0.	0.	1.60
0.19791E 02	0.00979E 02	-0.00454E 02	0.51299E 02	0.	0.	1.65
0.22440E 02	0.04092E 02	-0.11716E 03	0.91037E 02	0.	0.	1.70
0.22214E 02	0.07227E 02	-0.11476E 03	0.10414E 03	0.	0.	1.75
0.30142E 02	0.10954E 03	-0.76446E 02	0.00102E 02	0.	0.	1.80
0.40325E 02	0.12534E 03	-0.57434E 02	0.59976E 02	0.	0.	1.85
0.10262E 03	0.11908E 03	-0.62475E 02	0.51429E 02	0.	0.	1.90
0.17907E 03	-0.16060E 03	-0.07343E 02	0.13435E 03	0.	-0.	1.95
0.30256E 03	-0.17234E 03	-0.13263E 03	0.13002E 03	0.	-0.	2.00
-0.32133E 02	-0.13427E 03	0.14039E 02	0.10337E 03	-0.	-0.	2.05
-0.67033E 02	-0.11903E 03	0.24424E 02	0.37774E 02	-0.	-0.	2.10
-0.04700E 02	-0.12069E 03	0.27943E 02	0.01954E 02	-0.	-0.	2.15
-0.10396E 03	-0.12410E 03	0.30621E 02	0.79409E 02	-0.	-0.	2.20
-0.12096E 03	-0.12036E 03	0.32070E 02	0.73401E 02	-0.	-0.	2.25
-0.17439E 03	-0.06947E 02	0.40909E 02	0.56664E 02	-0.	-0.	2.30
-0.74031E 03	0.16193E 03	0.40033E 02	0.40000E 02	-0.	0.	2.35
-0.23943E 03	0.24410E 03	0.95496E 01	0.53552E 02	-0.	0.	2.40
-0.20390E 03	0.29475E 03	0.43305E 01	0.70270E 02	-0.	0.	2.45
-0.90671E 02	0.15183E 03	0.13196E 02	0.59105E 02	-0.	0.	2.50
0.03432E 07	0.45470E 02	0.43294E 02	0.30221E 02	0.	-0.	2.55
0.40034E 02	0.19492E 02	0.43214E 02	0.29370E 02	0.	-0.	2.60
0.38280E 07	0.92409E 01	0.40125E 02	0.23003E 02	0.	-0.	2.65
0.24043E 02	0.31220E 01	0.38605E 02	0.16927E 02	0.	-0.	2.70
0.19941E 07	0.73259E 01	0.42948E 02	0.10861E 02	-0.	-0.	2.75
0.25751E 07	-0.15877E 01	0.54609E 02	0.20067E 01	-0.	-0.	2.80
0.32130E 07	-0.13487E 02	0.66294E 02	-0.60567E 02	-0.	0.	2.85
0.44412E 07	-0.50092E 02	0.96322E 02	-0.74060E 02	-0.	0.	2.90
0.38794E 07	-0.31439E 02	0.76497E 07	-0.77907E 02	-0.	0.	2.95
-0.71209E 02	-0.21733E 02	-0.16162E 02	-0.32654E 02	0.	0.	3.00
-0.28079E 07	-0.03046E 01	-0.27469E 01	-0.13601E 02	0.	-0.	3.05
-0.24804E 02	-0.27017E 01	-0.20046E 02	-0.70050E 01	-0.	-0.	3.10
-0.79512E 02	0.32690E 00	-0.10723E 02	-0.33293E 01	-0.	-0.	3.15
-0.79575E 02	0.10795E 02	-0.21742E 02	0.95523E 01	-0.	-0.	3.20
-0.33318E 02	0.15306E 02	-0.31946E 02	0.13993E 02	-0.	0.	3.25
-0.34570E 02	0.21374E 02	-0.33612E 02	0.23204E 02	-0.	0.	3.30
-0.34800E 02	0.20499E 02	-0.33724E 02	0.32407E 02	-0.	0.	3.35
-0.37340E 02	0.31581E 02	-0.30596E 02	0.35313E 02	-0.	0.	3.40
-0.42938E 00	0.11871E 02	0.12179E 02	0.05095E 01	-0.	0.	3.45
0.41108E 01	0.70734E 01	0.14291E 02	0.28707E 01	-0.	0.	3.50
0.02000E 00	0.43024E 01	0.10115E 02	0.12102E 00	-0.	0.	3.55
-0.78591E 00	0.59333E 01	0.64809E 01	-0.70745E 00	-0.	0.	3.60
-0.60816E 01	0.54699E 01	0.33491E 01	-0.13749E 01	-0.	0.	3.65
0.15682E 01	0.59699E 01	0.36641E 01	-0.21143E 01	-0.	0.	3.70
0.79902E 01	0.73047E 01	0.32213E 01	-0.25929E 01	-0.	0.	3.75
0.34070E 01	0.	0.70004E 01	0.	0.	0.	3.80

Table XV - - - Continued

(PSI/PS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUT-OFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMISPAN 40.06 SEGMENT NUMBER 8

INCREMENTAL BEND SERIES		INCREMENTAL AXIAL SERIES			
REAL	IMAGINARY	REAL	IMAGINARY		
-0.13427E-00	0.73710E 02	-0.12400E 01	0.27007E 03	0.	0.
0.49237E 02	0.63100E 02	0.10550E 03	0.24197E 03	0.	0.
0.90530E 02	0.18692E 02	0.33090E 03	0.75320E 02	0.	0.
0.11480E 03	-0.95961E 01	0.43606E 03	-0.30997E 02	0.	0.
0.11057E 03	-0.73806E 02	0.42277E 03	-0.13336E 03	0.	0.
0.96627E 02	-0.46699E 02	0.37131E 03	-0.10676E 03	0.	0.
0.86442E 02	-0.56777E 02	0.33216E 03	-0.22910E 03	0.	0.
0.60623E 02	-0.67210E 02	0.30607E 03	-0.27272E 03	0.	0.
0.76707E 02	-0.60304E 02	0.28059E 03	-0.32993E 03	0.	0.
0.74177E 02	-0.12327E 03	0.27612E 03	-0.40926E 03	0.	0.
0.72555E 02	-0.20155E 03	0.25167E 03	-0.77403E 03	0.	0.
0.60560E 02	-0.26350E 03	0.17001E 03	-0.90754E 03	0.	0.
0.34717E 02	-0.33621E 03	0.62010E 02	-0.12291E 03	0.	0.
-0.24606E 02	-0.57509E 03	-0.17300E 03	-0.13615E 04	0.	0.
-0.82686E 02	-0.40102E 03	-0.30952E 03	-0.14033E 04	0.	0.
-0.17080E 03	-0.31401E 03	-0.71632E 03	-0.10105E 04	0.	0.
-0.40766E 03	0.44464E 02	-0.15137E 04	-0.45776E 02	0.	0.
-0.46533E 03	0.10890E 03	-0.16147E 04	0.63392E 03	0.	0.
-0.34223E 03	0.13051E 02	-0.11241E 04	0.40837E 03	0.	0.
-0.11973E 03	0.11104E 03	-0.34000E 03	0.30440E 03	0.	0.
-0.71877E 02	0.47544E 02	-0.10770E 03	0.22666E 03	0.	0.
-0.46094E 02	0.09600E 02	-0.11207E 03	0.16700E 03	0.	0.
-0.10070E 02	0.05379E 02	-0.74624E 02	0.11651E 03	0.	0.
-0.18239E 02	0.03926E 02	-0.30672E 02	0.02019E 02	0.	0.
-0.11848E 02	0.03029E 02	-0.03442E 02	0.06907E 02	0.	0.
-0.40112E 01	0.96363E 02	-0.76420E 02	0.67019E 02	0.	0.
0.79364E 01	0.97271E 02	-0.77310E 02	0.50253E 02	0.	0.
0.16316E 02	0.96724E 02	-0.90500E 02	0.37377E 02	0.	0.
0.20197E 02	0.91623E 02	-0.90351E 02	0.71140E 02	0.	0.
0.29203E 02	0.84823E 02	-0.11753E 03	0.96364E 02	0.	0.
0.40806E 02	0.87274E 02	-0.11170E 03	0.94903E 02	0.	0.
0.29496E 02	0.95293E 02	-0.04900E 02	0.74590E 02	0.	0.
0.56266E 02	0.10757E 03	-0.79607E 02	0.46066E 02	0.	0.
0.65332E 02	0.10646E 03	-0.10917E 03	0.65312E 02	0.	0.
0.10612E 03	-0.13261E 02	-0.15902E 03	0.21357E 03	0.	0.
0.17030E 03	-0.26027E 02	-0.15265E 03	0.21366E 03	0.	0.
0.75310E 01	0.11344E 02	0.22971E 02	0.10651E 03	0.	0.
0.51209E 01	0.47021E 02	0.37646E 02	0.10179E 03	0.	0.
0.21522E 02	0.73905E 02	0.51011E 02	0.19755E 03	0.	0.
0.46646E 02	0.09847E 02	0.71164E 02	0.20092E 03	0.	0.
0.70777E 02	0.10414E 03	0.93275E 02	0.19993E 03	0.	0.
0.13033E 03	0.52019E 02	0.16767E 03	0.10591E 03	0.	0.
0.25700E 03	-0.10260E 03	0.25555E 03	-0.20114E 02	0.	0.
0.14849E 03	-0.21570E 03	0.308760E 02	0.25956E 02	0.	0.
0.10091E 03	-0.22697E 03	0.12440E 02	0.07636E 02	0.	0.
0.50661E 02	-0.14463E 03	0.63510E 02	0.43257E 02	0.	0.
-0.50454E 02	-0.75612E 02	0.11690E 03	-0.25020E 01	0.	0.
-0.57976E 02	-0.49976E 02	0.07771E 02	-0.11997E 02	0.	0.
-0.50950E 02	-0.93457E 02	0.66796E 02	-0.16934E 02	0.	0.
-0.46010E 02	-0.19634E 02	0.46906E 02	-0.70509E 02	0.	0.
-0.43021E 02	-0.12293E 02	0.20227E 02	-0.11220E 02	0.	0.
-0.46140E 02	-0.71000E 01	0.14621E 02	-0.10972E 02	0.	0.
-0.49300E 02	0.15053E 02	0.36379E 01	3.25395E 01	0.	0.
-0.54696E 02	0.23635E 02	-0.10607E 02	0.14755E 02	0.	0.
-0.50699E 02	0.25904E 02	-0.02012E 01	0.10301E 02	0.	0.
-0.17270E 02	0.12101E 02	0.30522E 02	-0.30969E 01	0.	0.
-0.12700E 02	0.77920E 01	0.93255E 02	-0.12940E 02	0.	0.
-0.4123E 02	0.75495E 01	0.25541E 02	-0.16361E 02	0.	0.
-0.14080E 02	0.70174E 01	0.10407E 02	-0.17001E 02	0.	0.
-0.13001E 02	0.63373E 01	0.14196E 02	-0.15503E 02	0.	0.
-0.10564E 02	0.56913E 01	0.97000E 01	-0.10067E 02	0.	0.
-0.10104E 02	0.43190E 01	0.92537E 01	-0.19970E 02	0.	0.
-0.10007E 02	0.31225E 01	0.09962E 01	-0.13037E 02	0.	0.
-0.10561E 02	0.30419E 01	0.91907E 01	-0.14407E 02	0.	0.
-0.17259E 02	0.07200E 01	0.11003E 02	-0.16962E 02	0.	0.
-0.15964E 02	0.11766E 02	0.75020E 01	-0.15396E 02	0.	0.
-0.11637E 02	0.13694E 02	0.60050E 01	-0.13903E 02	0.	0.
-0.96617E 01	0.14435E 02	-0.60576E 00	-0.11334E 02	0.	0.
-0.61107E 01	0.14214E 02	-0.52139E 01	-0.07263E 01	0.	0.
-0.73921E 01	0.12040E 02	-0.64070E 01	-0.16000E 01	0.	0.
0.52004E 01	0.73400E 01	-0.60570E 01	0.19677E 01	0.	0.
0.91311E 01	0.	-0.62066E 01	0.	0.	0.

Table XV --- Continued

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMI SPAN: 40.06 SEGMENT NUMBER 107

INCIDENTAL SHEAR STRESS				INCIDENTAL AXIAL STRESS				FREQUENCY CPS
REAL	IMAGINARY			REAL	IMAGINARY			
-0.94903E-01	0.71707E 02	0.	0.	-0.10671E 01	-0.23030E 03	0.	0.	0.10
0.48004E 02	0.61323E 02	0.	0.	-0.15429E 03	-0.20674E 03	0.	0.	0.20
0.80023E 02	0.10141E 02	0.	0.	-0.20954E 03	-0.62655E 02	0.	0.	0.30
0.11137E 03	-0.02001E 01	0.	0.	-0.37259E 05	0.31270E 02	0.	0.	0.40
0.10714E 03	-0.32443E 02	0.	0.	-0.36123E 03	0.11395E 03	0.	0.	0.50
0.93501E 02	-0.44720E 02	0.	0.	-0.51724E 03	0.15950E 03	0.	0.	0.60
0.09540E 02	-0.54230E 02	0.	0.	-0.20301E 05	0.19982E 03	0.	0.	0.70
0.77370E 02	-0.64027E 02	0.	0.	-0.26151E 03	0.23302E 03	0.	0.	0.80
0.71623E 02	-0.76292E 02	0.	0.	-0.24650E 05	0.27649E 03	0.	0.	0.90
0.71499E 02	-0.11051E 03	0.	0.	-0.23593E 03	0.47650E 03	0.	0.	1.00
0.70455E 02	-0.14030E 03	0.	0.	-0.21504E 03	0.66204E 03	0.	0.	1.20
0.59904E 02	-0.24684E 03	0.	0.	-0.15210E 03	0.04379E 03	0.	0.	1.40
0.36214E 02	-0.31007E 03	0.	0.	-0.52991E 02	0.10467E 04	0.	0.	1.60
-0.10087E 02	-0.35531E 03	0.	0.	0.15029E 03	0.11642E 04	0.	0.	1.80
-0.75577E 02	-0.30142E 03	0.	0.	0.33811E 03	0.11992E 04	0.	0.	2.00
-0.15500E 03	-0.30200E 03	0.	0.	0.61203E 03	0.06337E 03	0.	0.	2.20
-0.37904E 03	-0.47942E 02	0.	0.	0.12951E 04	0.37402E 02	0.	0.	2.40
-0.43737E 03	0.96001E 02	0.	0.	0.13797E 04	-0.37076E 03	0.	0.	2.60
-0.12284E 05	0.12073E 03	0.	0.	0.96047E 03	-0.34892E 03	0.	0.	2.80
-0.21540E 05	0.10294E 03	0.	0.	0.29124E 05	-0.26015E 03	0.	0.	3.00
-0.40000E 02	0.90529E 02	0.	0.	0.10030E 03	-0.19564E 03	0.	0.	3.20
-0.43520E 02	0.83204E 02	0.	0.	0.96435E 02	-0.14337E 03	0.	0.	3.40
-0.26166E 02	0.79240E 02	0.	0.	0.63761E 02	-0.99383E 02	0.	0.	3.60
-0.16717E 02	0.70227E 02	0.	0.	0.50131E 02	-0.70000E 02	0.	0.	3.80
-0.10193E 02	0.65323E 02	0.	0.	0.71294E 02	-0.76374E 02	0.	0.	4.00
-0.31319E 01	0.60129E 02	0.	0.	0.65302E 02	-0.57263E 02	0.	0.	4.20
0.75040E 01	0.60461E 02	0.	0.	0.66227E 02	-0.49774E 02	0.	0.	4.40
0.14571E 02	0.67990E 02	0.	0.	0.77320E 02	-0.49196E 02	0.	0.	4.60
0.17690E 02	0.84172E 02	0.	0.	0.84017E 02	-0.60791E 02	0.	0.	4.80
0.24526E 02	0.00294E 02	0.	0.	0.10044E 03	-0.82705E 02	0.	0.	5.00
0.25736E 02	0.84412E 02	0.	0.	0.95439E 02	-0.81154E 02	0.	0.	5.20
0.26670E 02	0.02077E 02	0.	0.	0.72617E 02	-0.63706E 02	0.	0.	5.40
0.34410E 02	0.10295E 03	0.	0.	0.68010E 02	-0.39377E 02	0.	0.	5.60
0.45064E 02	0.10103E 03	0.	0.	0.93274E 02	-0.30807E 02	0.	0.	5.80
0.10449E 03	-0.17763E 02	0.	0.	0.13507E 03	-0.18260E 03	0.	0.	6.00
0.17355E 03	-0.79493E 02	0.	0.	0.19861E 03	-0.18376E 03	0.	0.	6.20
0.47375E 01	0.66228E 01	0.	0.	-0.19283E 02	-0.15765E 03	0.	0.	6.40
0.47164E 01	0.40020E 02	0.	0.	-0.32164E 02	-0.15529E 03	0.	0.	6.60
0.14904E 02	0.63533E 02	0.	0.	-0.43535E 02	-0.16442E 03	0.	0.	6.80
0.42423E 02	0.77775E 02	0.	0.	-0.60005E 02	-0.17187E 03	0.	0.	7.00
0.64690E 02	0.91010E 02	0.	0.	-0.79649E 02	-0.17083E 03	0.	0.	7.20
0.13594E 03	0.28895E 02	0.	0.	-0.13264E 03	-0.90406E 02	0.	0.	7.40
0.23354E 03	-0.18190E 03	0.	0.	-0.21833E 03	-0.74021E 02	0.	0.	7.60
0.14525E 03	-0.21045E 03	0.	0.	-0.53216E 02	-0.30722E 02	0.	0.	7.80
0.10007E 03	-0.22577E 03	0.	0.	-0.10629E 02	-0.74879E 02	0.	0.	8.00
0.34625E 02	-0.14012E 03	0.	0.	-0.57183E 02	-0.36943E 02	0.	0.	8.20
-0.65334E 02	-0.69210E 02	0.	0.	-0.99940E 02	0.22061E 01	0.	0.	8.40
-0.61337E 02	-0.43994E 02	0.	0.	-0.74999E 02	0.10992E 02	0.	0.	8.60
-0.52110E 02	-0.20084E 02	0.	0.	-0.53387E 02	0.14469E 02	0.	0.	8.80
-0.45195E 02	-0.14977E 02	0.	0.	-0.40140E 02	0.17677E 02	0.	0.	9.00
-0.40652E 02	-0.04753E 01	0.	0.	-0.24110E 02	0.18131E 02	0.	0.	9.20
-0.40059E 02	-0.47336E 01	0.	0.	-0.12493E 02	0.16211E 02	0.	0.	9.40
-0.40855E 02	0.73862E 01	0.	0.	-0.46591E 01	-0.21899E 01	0.	0.	9.60
-0.41970E 02	0.12512E 02	0.	0.	0.01314E 01	-0.12607E 02	0.	0.	9.80
-0.39523E 02	0.14125E 02	0.	0.	0.70757E 01	-0.15706E 02	0.	0.	10.00
-0.27051E 02	0.82321E 01	0.	0.	-0.26079E 02	0.26481E 01	0.	0.	10.20
-0.19254E 02	0.75047E 01	0.	0.	-0.28414E 02	0.11057E 02	0.	0.	10.40
-0.18951E 02	0.51940E 01	0.	0.	-0.21823E 02	0.13942E 02	0.	0.	10.60
-0.17951E 02	0.64575E 01	0.	0.	-0.15090E 02	0.14526E 02	0.	0.	10.80
-0.16827E 02	0.91622E 01	0.	0.	-0.12130E 02	0.13313E 02	0.	0.	11.00
-0.15240E 02	0.84930E 01	0.	0.	-0.03644E 01	0.12703E 02	0.	0.	11.20
-0.15049E 02	0.87355E 01	0.	0.	-0.79067E 01	0.11940E 02	0.	0.	11.40
-0.14960E 02	0.84372E 01	0.	0.	-0.76866E 01	0.11140E 02	0.	0.	11.60
-0.15048E 02	0.96020E 01	0.	0.	-0.78520E 01	0.12310E 02	0.	0.	11.80
-0.16486E 02	0.12737E 02	0.	0.	-0.10155E 02	0.14493E 02	0.	0.	12.00
-0.14573E 02	0.13445E 02	0.	0.	-0.64784E 01	0.14009E 02	0.	0.	12.20
-0.12470E 02	0.14763E 02	0.	0.	-0.34227E 01	0.11180E 02	0.	0.	12.40
-0.44533E 01	0.13110E 02	0.	0.	0.51474E 00	0.96840E 01	0.	0.	12.60
-0.44057E 01	0.14330E 02	0.	0.	0.27632E 01	0.57689E 01	0.	0.	12.80
0.97795E 00	0.11604E 02	0.	0.	0.54743E 01	0.13740E 01	0.	0.	13.00
0.60945E 01	0.68956E 01	0.	0.	0.58429E 01	-0.16812E 01	0.	0.	13.20
0.95320E 01	0.	0.	0.	0.35440E 01	0.	0.	0.	13.40

Table XV --- Continued

(PSI/PS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

BODY BALANCE STATION: 540 SEGMENT NUMBER 17

EXPERIMENTAL SPEAR STRESS						FREQ (CYC)
REAL	IMAGINARY					
-0.41546E-01	-0.11891E 01	0.	-0.	0.	-0.	0.30
-0.12179E 01	-0.77888E 00	0.	-0.	0.	-0.	0.30
-0.18444E 01	0.91124E-01	0.	-0.	0.	-0.	0.30
-0.19906E 01	0.90408E 00	-0.	-0.	-0.	-0.	0.30
-0.17376E 01	0.74622E 00	-0.	-0.	-0.	-0.	0.30
-0.13511E 01	0.80593E 00	-0.	-0.	-0.	-0.	0.30
-0.13179E 01	0.82421E 00	-0.	-0.	-0.	-0.	0.30
-0.44007E 00	0.84129E 00	-0.	-0.	-0.	-0.	0.30
-0.40381E 00	0.87587E 00	-0.	-0.	-0.	-0.	0.30
-0.47077E 00	0.10753E 01	-0.	-0.	-0.	-0.	1.00
-0.49424E 00	0.15150E 01	-0.	-0.	-0.	-0.	1.30
-0.46410E 00	0.19134E 01	0.	-0.	0.	-0.	1.30
-0.47164E 00	0.24331E 01	0.	-0.	0.	-0.	1.40
-0.46978E 00	0.27529E 01	-0.	-0.	-0.	-0.	1.40
-0.42773E-00	0.30482E 01	-0.	-0.	-0.	-0.	1.40
-0.49574E-01	0.24039E 01	-0.	-0.	-0.	-0.	1.30
-0.15715E 01	0.13965E 01	-0.	-0.	-0.	-0.	1.25
-0.25127E 01	0.31194E-00	-0.	-0.	-0.	-0.	1.60
-0.14053E 01	-0.14333E-00	-0.	0.	-0.	0.	1.65
-0.45007E-00	-0.45090E-01	-0.	0.	-0.	0.	1.80
-0.75197E-01	0.30583E-01	-0.	0.	-0.	0.	1.80
-0.17078E-00	0.12103E-00	-0.	0.	-0.	0.	2.00
-0.36177E-00	0.25075E-00	-0.	-0.	-0.	-0.	2.10
-0.43919E 00	0.45146E-00	0.	-0.	0.	-0.	2.20
-0.70718E 00	0.56544E 00	0.	-0.	0.	-0.	2.30
-0.71011E 00	0.70344E 00	0.	-0.	0.	-0.	2.30
-0.73506E 00	0.79091E 00	0.	-0.	0.	-0.	2.40
-0.46940E 00	0.81300E 00	0.	-0.	0.	-0.	2.40
-0.41489E 00	0.73339E 00	0.	-0.	0.	-0.	2.40
-0.47446E-00	0.42470E-00	0.	-0.	0.	-0.	2.40
-0.41417E-00	0.20701E-00	0.	-0.	0.	-0.	2.40
-0.78708E 00	0.23893E-00	0.	-0.	0.	-0.	2.50
-0.11547E 01	0.45288E-00	0.	-0.	0.	-0.	2.50
-0.17489E 01	0.77007E 00	0.	-0.	0.	-0.	2.60
-0.23210E 01	0.28963E 01	0.	-0.	0.	-0.	2.70
-0.31240E 01	0.46034E 01	0.	-0.	0.	-0.	2.80
-0.47678E 00	0.57247E 01	0.	-0.	0.	-0.	3.00
-0.43940E-00	0.79344E 01	0.	-0.	0.	-0.	3.10
-0.77891E 00	0.10005E 02	-0.	-0.	-0.	-0.	3.20
-0.27924E 01	0.11310E 02	-0.	-0.	-0.	-0.	3.20
-0.49949E 01	0.12024E 02	-0.	-0.	-0.	-0.	3.20
-0.12118E 02	0.39513E 01	-0.	-0.	-0.	-0.	3.30
-0.20749E 02	-0.41543E 01	-0.	0.	-0.	0.	3.40
-0.21439E 01	-0.42554E 01	-0.	0.	-0.	0.	3.50
-0.55491E 00	-0.18374E-00	0.	-0.	0.	-0.	3.60
-0.95789E 00	-0.18447E 01	-0.	0.	-0.	0.	3.60
-0.42453E 01	-0.36728E 01	-0.	0.	-0.	0.	3.70
-0.31931E 01	-0.34853E 01	-0.	0.	-0.	0.	3.80
-0.17666E 01	-0.25987E 01	-0.	0.	-0.	0.	4.00
-0.77809E 00	-0.24141E 01	-0.	0.	-0.	0.	4.20
-0.72858E-01	-0.21506E 01	-0.	0.	-0.	0.	4.30
-0.13809E-00	-0.20910E 01	-0.	0.	-0.	0.	4.40
-0.16457E-00	-0.23517E 01	-0.	0.	-0.	0.	4.60
-0.19904E-00	-0.25313E 01	-0.	0.	-0.	0.	4.80
-0.34077E-00	-0.23803E 01	-0.	0.	-0.	0.	5.00
-0.13132E 01	-0.18525E 01	0.	0.	0.	0.	5.10
-0.15916E 01	-0.15331E 01	0.	0.	0.	0.	5.30
-0.18658E 01	-0.12681E 01	0.	0.	0.	0.	5.40
-0.24655E 01	-0.87254E 00	0.	0.	0.	0.	5.70
-0.33156E 01	0.10737E 01	0.	-0.	0.	-0.	5.80
-0.51447E 01	0.19715E 01	0.	-0.	0.	-0.	6.00
-0.54273E 01	0.31694E 01	0.	-0.	0.	-0.	6.00
-0.54653E 01	0.45877E 01	0.	-0.	0.	-0.	6.00
-0.50013E 01	0.49601E 01	0.	-0.	0.	-0.	6.00
-0.14277E 01	0.91837E 00	-0.	-0.	-0.	-0.	6.20
-0.15643E 01	0.14378E-00	-0.	-0.	-0.	-0.	6.40
-0.46113E 00	-0.12448E-00	-0.	-0.	-0.	-0.	6.60
-0.25744E-00	-0.12172E-00	-0.	-0.	-0.	-0.	7.00
-0.41840E-01	-0.54738E-01	-0.	-0.	-0.	-0.	7.40
-0.27121E-01	-0.37764E-01	-0.	-0.	-0.	-0.	8.20
-0.12324E-03	-0.62764E-01	-0.	-0.	-0.	-0.	9.00
-0.17713E-01	0.	-0.	0.	-0.	0.	10.00

Table XV --- Continued

(PSI/PS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

BODY BALANCE STATION: 820 SEGMENT NUMBER 1

DIAGONAL AXIAL STRESS

		REAL	IMAGINARY			FREQUENCY CPS
0.	0.	0.14020E 01	0.11502E 03	0.	0.	0.30
0.	0.	0.91791E 02	2.90364E 02	0.	0.	0.30
0.	0.	0.13394E 03	0.15400E 02	0.	0.	0.30
0.	0.	0.10530E 03	-0.27779E 02	0.	0.	0.30
0.	-0.	0.17321E 03	-0.61520E 02	0.	-0.	0.30
0.	-0.	0.14671E 03	-0.77793E 02	0.	-0.	0.30
0.	-0.	0.12093E 03	-0.90059E 02	0.	-0.	0.30
0.	-0.	0.11019E 03	-0.10295E 03	0.	-0.	0.30
0.	-0.	0.11194E 03	-0.11949E 03	0.	-0.	0.30
0.	-0.	0.10061E 03	-0.17704E 03	0.	-0.	0.30
0.	-0.	0.10547E 03	-0.27270E 03	0.	-0.	0.30
0.	-0.	0.00204E 02	-0.34033E 03	0.	-0.	0.30
0.	-0.	0.53972E 02	-0.43528E 03	0.	-0.	0.30
-0.	-0.	-0.21786E 02	-0.40013E 03	-0.	-0.	0.30
-0.	-0.	-0.94391E 02	-0.50846E 03	-0.	-0.	0.30
-0.	-0.	-0.20281E 03	-0.39070E 03	-0.	-0.	0.30
-0.	-0.	-0.40533E 03	-0.60010E 02	-0.	-0.	0.30
-0.	0.	-0.53049E 03	0.11324E 03	-0.	0.	0.30
-0.	0.	-0.37861E 03	0.11706E 03	-0.	0.	0.30
-0.	0.	-0.10442E 03	0.02115E 02	-0.	0.	0.30
-0.	0.	-0.46515E 02	0.52419E 02	-0.	0.	0.30
-0.	0.	-0.15921E 02	0.26098E 02	-0.	0.	0.30
0.	0.	0.16612E 01	0.06538E 00	0.	0.	0.30
0.	-0.	0.11113E 02	-0.23298E 02	0.	-0.	0.30
0.	-0.	0.41003E 01	-0.33168E 02	0.	-0.	0.30
0.	-0.	0.33616E 01	-0.51983E 02	0.	-0.	0.30
-0.	-0.	-0.34249E 01	-0.51034E 02	-0.	-0.	0.30
-0.	-0.	-0.21615E 02	-0.62007E 02	-0.	-0.	0.30
-0.	-0.	-0.31440E 02	-0.46208E 02	-0.	-0.	0.30
-0.	-0.	-0.50657E 02	-0.90328E 01	-0.	-0.	0.30
-0.	-0.	-0.57843E 02	-0.23182E 01	-0.	-0.	0.30
-0.	-0.	-0.22121E 02	-0.13984E 02	-0.	-0.	0.30
-0.	-0.	-0.28605E 01	-0.47191E 02	-0.	-0.	0.30
-0.	-0.	-0.47438E 01	-0.63047E 02	-0.	-0.	0.30
-0.	-0.	-0.27224E 02	-0.47928E 01	-0.	-0.	0.30
-0.	-0.	-0.00642E 02	-0.46099E 02	-0.	-0.	0.30
0.	-0.	0.39611E 02	-0.12611E 03	0.	-0.	0.30
0.	-0.	0.60151E 02	-0.23312E 03	0.	-0.	0.30
0.	-0.	0.19306E 02	-0.32541E 03	0.	-0.	0.30
-0.	-0.	-0.56971E 02	-0.30009E 03	-0.	-0.	0.30
-0.	-0.	-0.14021E 03	-0.41035E 03	-0.	-0.	0.30
-0.	-0.	-0.41300E 03	-0.95408E 02	-0.	-0.	0.30
-0.	0.	-0.73783E 03	0.34171E 03	-0.	0.	0.30
0.	0.	0.10019E 02	0.11410E 03	0.	0.	0.30
0.	-0.	0.10402E 03	-0.63286E 02	0.	-0.	0.30
0.	0.	0.13287E 01	0.30239E 02	0.	0.	0.30
-0.	0.	-0.22210E 03	0.15003E 03	-0.	0.	0.30
-0.	0.	-0.12256E 03	0.13279E 03	-0.	0.	0.30
-0.	0.	-0.54074E 02	0.13011E 03	-0.	0.	0.30
-0.	0.	-0.10138E 02	0.10090E 03	-0.	0.	0.30
0.	0.	0.24813E 02	0.04378E 02	0.	0.	0.30
0.	0.	0.42422E 02	0.74934E 02	0.	0.	0.30
0.	0.	0.32274E 02	0.44714E 02	0.	0.	0.30
0.	0.	0.67968E 02	0.31254E 02	0.	0.	0.30
0.	0.	0.65695E 02	0.21498E 02	0.	0.	0.30
0.	0.	0.31126E 02	0.34112E 02	0.	0.	0.30
0.	0.	0.30421E 02	0.34783E 02	0.	0.	0.30
0.	0.	0.40272E 02	0.29496E 02	0.	0.	0.30
0.	0.	0.53146E 02	0.21124E 02	0.	0.	0.30
0.	-0.	0.60491E 02	-0.12977E 02	0.	-0.	0.30
0.	-0.	0.90498E 02	-0.27972E 02	0.	-0.	0.30
0.	-0.	0.10297E 03	-0.47756E 02	0.	-0.	0.30
0.	-0.	0.10341E 03	-0.71060E 02	0.	-0.	0.30
0.	-0.	0.95603E 02	-0.77724E 02	0.	-0.	0.30
-0.	-0.	-0.06315E 01	-0.14992E 02	-0.	-0.	0.30
-0.	-0.	-0.10725E 02	-0.31031E 01	-0.	-0.	0.30
0.	-0.	0.12145E 01	-0.47990E 01	0.	-0.	0.30
0.	-0.	0.62143E 01	-0.72235E 01	0.	-0.	0.30
0.	-0.	0.50231E 01	-0.96245E 01	0.	-0.	0.30
0.	-0.	0.43788E 00	-0.03320E 01	0.	-0.	0.30
-0.	-0.	-0.50716E 01	-0.43969E 01	-0.	-0.	0.30
-0.	0.	-0.89344E 01	0.	-0.	0.	0.30

Table XV --- Continued

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 15 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.55

PERCENT SEMISPAN: 27 SEGMENT NUMBER 10

INCIDENTAL SHEAR STRESS		INCIDENTAL AXIAL STRESS		FREQUENCY CPS
REAL	IMAGINARY	REAL	IMAGINARY	
0.047217-01	0.55385F 02	-0.00681E 00	0.30363E 03	0.0
0.24507F 02	0.29947F 02	0.19898E 03	0.26210E 03	0.0
0.44132F 02	0.83492F 01	0.37020E 03	0.78906E 02	0.0
0.55793F 02	-0.51552F 01	0.47339E 03	-0.29261E 02	0.0
0.43094E 02	-0.16509F 02	0.45759E 03	-0.14192E 03	0.0
0.44190E 02	-0.22434F 02	0.40079E 03	-0.19740E 03	0.0
0.41293F 02	-0.27016F 02	0.35806E 03	-0.24096E 03	0.0
0.34231F 02	-0.31773F 02	0.32986E 03	-0.28550E 03	0.0
0.36471F 02	-0.37815F 02	0.31144E 03	-0.33952E 03	0.0
0.34926F 02	-0.49253F 02	0.29897E 03	-0.51720E 03	0.0
0.36453F 02	-0.97188E 02	0.27742E 03	-0.80276E 03	0.0
0.33495F 02	-0.12897E 03	0.20961E 03	-0.10256E 04	0.0
0.22848F 02	-0.16771F 03	0.16340E 02	-0.12780E 04	0.0
-0.42848F 01	-0.18946E 03	-0.14204E 03	-0.14050E 04	0.0
-0.32143F 02	-0.20625F 03	-0.36551F 03	-0.14789E 04	0.0
-0.74605F 02	-0.17111E 03	-0.69482E 03	-0.10976E 04	0.0
-0.19911F 03	-0.34902F 02	-0.15332E 04	-0.10140E 03	0.0
-0.23925F 03	0.46462F 02	-0.16662E 04	0.40150F 03	0.0
-0.18287F 03	0.70084E 02	-0.11743E 04	0.40170E 03	0.0
-0.70840F 02	0.64637E 02	-0.36373E 03	0.30779E 03	0.0
-0.43308F 02	0.62247F 02	-0.20130F 03	0.23180E 03	0.0
-0.39738F 02	0.63716F 02	-0.12059E 03	0.17513E 03	0.0
-0.20436E 02	0.69980F 02	-0.77275E 02	0.12795E 03	0.0
-0.96218F 01	0.74659E 02	-0.34149E 02	0.87179E 02	0.0
0.14082F 02	0.70993E 02	-0.32018E 02	0.70801E 02	0.0
0.17235F 02	0.77041F 02	-0.52813E 02	0.46193E 02	0.0
0.24472F 02	0.79877F 02	-0.65530E 02	0.38245E 02	0.0
0.34061F 02	0.79724F 02	-0.89446F 02	0.55754F 02	0.0
0.39009E 02	0.72921E 02	-0.97472F 02	0.56486E 02	0.0
0.50393F 02	0.63592F 02	-0.12910E 03	0.10052E 03	0.0
0.50381F 02	0.69316F 02	-0.12646F 03	0.11476F 03	0.0
0.43533F 02	0.84011E 02	-0.84240E 02	0.97085F 02	0.0
0.54631F 02	0.10597E 03	-0.63312E 02	0.66091E 02	0.0
0.10102F 03	0.10496E 03	-0.68845E 02	0.56672E 02	0.0
0.16764F 03	-0.10330E 03	-0.96249E 02	0.14305E 03	0.0
0.29234F 03	-0.16149F 03	-0.14613E 03	0.14527E 03	0.0
-0.28309F 02	-0.11812E 03	0.16392E 02	0.11391E 03	0.0
-0.36137F 02	-0.93940E 02	0.26914F 02	0.96723E 02	0.0
-0.71372F 02	-0.85784E 02	0.30791E 02	0.90310E 02	0.0
-0.81034F 02	-0.83382E 02	0.33523E 02	0.87505F 02	0.0
-0.88258F 02	-0.82513E 02	0.36221F 02	0.80885E 02	0.0
-0.10972F 03	-0.71410E 02	0.45080E 02	0.62441E 02	0.0
-0.15204F 03	0.89707F 02	0.53823E 02	0.45047E 02	0.0
-0.20149F 03	0.18767F 03	0.10525E 02	0.61216E 02	0.0
-0.16405E 03	0.21643F 03	0.47770E 01	0.77443E 02	0.0
-0.70035F 02	0.97869E 02	0.14582E 02	0.65131E 02	0.0
0.75812F 02	0.12316E 02	0.47708E 02	0.42118E 02	0.0
0.47226F 02	-0.94089F 01	0.47620F 02	0.32345E 02	0.0
0.24912F 02	-0.10415E 02	0.44216E 02	0.25349E 02	0.0
0.14327E 02	-0.10380E 02	0.42629E 02	0.18653E 02	0.0
0.18777E-00	-0.92644E 02	0.47527F 02	0.11968E 02	0.0
-0.35289E 01	-0.84821F 01	0.60177E 02	0.28725E 01	0.0
-0.49824F 01	-0.67778F 01	0.73053E 02	-0.55518E 02	0.0
-0.69816F 01	-0.61227E 01	0.95124E 02	-0.82493E 02	0.0
-0.72941E 01	-0.49639F 01	0.64297E 02	-0.85851E 02	0.0
-0.78081E 01	-0.46116E 01	-0.17810E 02	-0.36016E 02	0.0
-0.78159F 01	-0.37278E 01	-0.30270E 02	-0.15076E 02	0.0
-0.81379F 01	-0.25348E 01	-0.22972E 02	-0.77192E 01	0.0
-0.10873E 02	-0.11493F 01	-0.20631E 02	-0.36687F 01	0.0
-0.13955E 02	0.38635F 01	-0.23959E 02	0.10526E 02	0.0
-0.17386F 02	0.60553F 01	-0.59793E 02	0.16962E 02	0.0
-0.18059E 02	0.89105E 01	-0.37054E 02	0.25549E 02	0.0
-0.18167F 02	0.12519F 02	-0.57163F 02	0.35800E 02	0.0
-0.17110F 02	0.13721E 02	-0.33713F 02	0.38920E 02	0.0
-0.20813F 01	0.49234F 01	0.13413E 02	0.93671E 01	0.0
-0.14308F 01	0.36368F 01	0.15748E 02	0.31734F 01	0.0
-0.27408F 01	0.32199F 01	0.11146F 02	0.13424E-00	0.0
-0.32940E 01	0.43904E 01	0.73719E 01	-0.86774E-00	0.0
-0.28731F 01	0.51455F 01	0.38944E 01	-0.73648E 01	0.0
-0.11105E 01	0.48479E 01	0.42603F 01	-0.23299F 01	0.0
0.81682E 00	0.37366E 01	0.35497E 01	-0.28513E 01	0.0
0.26788F 01	0.19723E 01	0.22131E 01	-0.30441E 01	0.0
0.34164F 01	0.23041F-00	0.12964E 01	-0.28343E 01	0.0
0.37481F 01	-0.12214F 01	0.28049F-00	-0.24430F 01	0.0
0.31242F 01	-0.21871F 01	-0.44565E 00	-0.18949E 01	0.0
0.21491E 01	-0.25813E 01	-0.10438E 01	-0.12290F 01	0.0
0.97849F 00	0.	-0.14243E 01	0.	0.0

Table XV --- Continued

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 15 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMISPAN: 27 SEGMENT NUMBER 14

INCREMENTAL BEND STRESS		INCREMENTAL AXIAL STRESS		FREQUENCY CPS
REAL	IMAGINARY	REAL	IMAGINARY	
0.62913E-02	0.10700E 03	-0.73216E 00	0.27555E 03	0.
0.72352E 02	0.91790E 02	0.18057E 03	0.23785E 03	0.10
0.13203E 03	0.24474E 02	0.33504E 03	0.71405E 02	0.20
0.36670E 03	-0.14404E 02	0.42900E 03	-0.35620E 02	0.30
0.16010E 03	-0.49190E 02	0.41525E 03	-0.12870E 03	0.40
0.13427E 03	-0.67313E 02	0.36365E 03	-0.17921E 03	0.50
0.12390E 03	-0.81121E 02	0.32400E 03	-0.21064E 03	0.60
0.11416E 03	-0.91121E 02	0.29934E 03	-0.25091E 03	0.70
0.10807E 03	-0.11235E 03	0.28263E 03	-0.30010E 03	0.80
0.10451E 03	-0.17053E 03	0.27131E 03	-0.36055E 03	0.90
0.10109E 03	-0.24837E 03	0.25192E 03	-0.42049E 03	1.00
0.95455E 02	-0.34609E 03	0.19022E 03	-0.53067E 03	1.10
0.42640E 02	-0.43977E 03	0.87427E 02	-0.51597E 04	1.20
-0.22229E 02	-0.40954E 03	-0.12800E 03	-0.12750E 04	1.30
-0.95615E 02	-0.52411E 03	-0.33140E 03	-0.13421E 04	1.40
-0.20912E 03	-0.41590E 03	-0.63053E 03	-0.09607E 03	1.50
-0.50773E 03	-0.74567E 02	-0.13914E 04	-0.02014E 02	1.60
-0.5F304E 03	0.11760E 03	-0.15120E 04	0.37053E 03	1.70
-0.42334E 03	0.14750E 03	-0.10654E 04	0.37000E 03	1.80
-0.14404E 03	0.12261E 03	-0.33608E 03	0.27927E 03	1.90
-0.58042E 02	0.10529E 03	-0.18286E 03	0.23035E 03	2.00
-0.45479E 02	0.95527E 02	-0.10944E 03	0.15093E 03	2.10
-0.35441E 02	0.92228E 02	-0.70124E 02	0.11411E 03	2.20
-0.19527E 02	0.88066E 02	-0.49139E 02	0.79113E 02	2.30
0.44824E 01	0.90290E 02	-0.47203E 02	0.63524E 02	2.40
0.82011E 01	0.81817E 02	-0.47745E 01	0.41919E 02	2.50
0.13072E 02	0.82955E 02	-0.59467E 02	0.32041E 02	2.60
0.17870E 02	0.81492E 02	-0.77721E 02	0.37446E 02	2.70
0.19791E 02	0.80379E 02	-0.88454E 02	0.31259E 02	2.80
0.22460E 02	0.84092E 02	-0.11716E 03	0.91037E 02	2.90
0.22214E 02	0.97227E 02	-0.11476E 03	0.10414E 03	3.00
0.30142E 02	0.10950E 03	-0.76444E 02	0.88102E 02	3.10
0.44375E 02	0.12536E 03	-0.57434E 02	0.59976E 02	3.20
0.10282E 03	0.11947E 03	-0.62475E 02	0.51429E 02	3.30
0.17392E 03	-0.10660E 03	-0.87343E 02	0.13435E 03	3.40
0.30256E 03	-0.17236E 03	-0.13243E 03	0.13002E 03	3.50
-0.32133E 02	-0.13427E 03	0.14839E 02	0.10337E 03	3.60
-0.47433E 02	-0.11943E 03	0.24424E 02	0.87774E 02	3.70
-0.46700E 02	-0.12709E 03	0.27943E 02	0.81954E 02	3.80
-0.10396E 03	-0.12418E 03	0.30421E 02	0.79409E 02	3.90
-0.12046E 03	-0.12836E 03	0.32870E 02	0.73401E 02	4.00
-0.17490E 03	-0.86947E 02	0.40969E 02	0.36644E 02	4.10
-0.26431E 03	0.16193E 03	0.48843E 02	0.40880E 02	4.20
-0.25943E 03	0.24410E 03	0.95496E 01	0.33332E 02	4.30
-0.20190E 03	0.29425E 03	0.43305E 01	0.70270E 02	4.40
-0.00671E 02	0.15183E 03	0.13196E 02	0.39105E 02	4.50
0.05432E 02	0.45470E 02	0.43294E 02	0.38221E 02	4.60
0.60894E 02	0.19492E 02	0.43214E 02	0.29370E 02	4.70
0.38280E 02	0.92409E 01	0.40129E 02	0.23003E 02	4.80
0.24863E 02	0.51220E 01	0.38685E 02	0.16927E 02	4.90
0.19441E 02	0.25259E 01	0.42948E 02	0.10641E 02	5.00
0.25241E 02	-0.19877E 01	0.54609E 02	0.26047E 01	5.10
0.72150E 02	-0.33487E 02	0.66294E 02	-0.48567E 02	5.20
0.54612E 02	-0.50092E 02	0.86322E 02	-0.74860E 02	5.30
0.18374E 02	-0.51639E 02	0.76497E 02	-0.77907E 02	5.40
-0.21264E 02	-0.71741E 02	-0.16162E 02	-0.32684E 02	5.50
-0.78979E 02	-0.43046E 01	-0.27469E 02	-0.13681E 02	5.60
-0.24804E 02	-0.27817E 01	-0.20846E 02	-0.70050E 01	5.70
-0.21512E 02	0.52690E 00	-0.18723E 02	-0.33292E 01	5.80
-0.24742E 02	0.10795E 02	-0.31742E 02	0.95523E 01	5.90
-0.13118E 02	0.15304E 02	-0.31946E 02	0.15999E 02	6.00
-0.14578E 02	0.21526E 02	-0.53612E 02	0.23204E 02	6.10
-0.14640E 02	0.28699E 02	-0.33724E 02	0.32487E 02	6.20
-0.12340E 02	0.31583E 02	-0.40596E 02	0.35919E 02	6.30
0.42948E-00	0.11871E 02	0.12174E 02	0.85005E 01	6.40
0.51108E 01	0.74753E 01	0.14291E 02	0.28797E 01	6.50
0.82100E 00	0.63026E 01	0.10175E 02	0.12182E-00	6.60
-0.24551E-00	0.99933E 01	0.44749E 01	-0.73763E 00	6.70
-0.60416E-01	0.54649E 01	0.33491E 01	-0.13753E 01	6.80
0.15642E 01	0.39499E 01	0.38641E 01	-0.21143E 01	6.90
0.29902E 01	0.73047E 01	0.12213E 01	-0.25929E 01	7.00
0.18000E 01	0.62232E 00	0.20004E 01	-0.27624E 01	7.10
0.35553E 01	-0.45267E-00	0.11745E 01	-0.25722E 01	7.20
0.29488E 01	-0.96154E 00	0.23435E-00	-0.22170E 01	7.30
-0.27255E 01	-0.17204E 01	-0.49916E-00	-0.17196E 01	7.40
0.17172E 01	-0.12542E 01	-0.94902E 00	-0.11161E 01	7.50
0.13756E 01	0.	-0.12925E 01	0.	7.60

Table XV --- Continued

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 15 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.65

PERCENT SEMISPAN: 40.06 SEGMENT NUMBER 8

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY
REAL	IMAGINARY	REAL	IMAGINARY			
-0.13427E-00	0.73780E 02	-0.12489E 01	0.27897E 03	0.	0.	0.00
0.49232E 02	0.63188E 02	0.18058E 03	0.24197E 03	0.	0.	0.00
0.90538E 02	0.14492E 02	0.33849E 03	0.73529E 02	0.	0.	0.00
0.11480E 03	-0.95941E 01	0.43606E 03	-0.34597E 02	0.	-0.	0.00
0.11057E 03	-0.33806E 02	0.42277E 03	-0.13336E 03	0.	-0.	0.00
0.96627E 02	-0.46699E 02	0.37131E 03	-0.18676E 03	0.	-0.	0.00
0.86442E 02	-0.56777E 02	0.33216E 03	-0.22918E 03	0.	-0.	0.00
0.80023E 02	-0.47218E 02	0.30607E 03	-0.27272E 03	0.	-0.	0.00
0.76277E 02	0.80304E 02	0.28059E 03	-0.32593E 03	0.	-0.	0.00
0.74177E 02	-0.12527E 03	0.27612E 03	-0.49926E 03	0.	-0.	0.00
0.72555E 02	-0.20155E 03	0.25167E 03	-0.77483E 03	0.	-0.	1.00
0.69560E 02	-0.26338E 03	0.17801E 03	-0.98754E 03	0.	-0.	1.00
0.34717E 02	-0.33621E 03	0.62019E 02	-0.12251E 04	0.	-0.	1.00
-0.24606E 02	-0.37509E 03	-0.17589E 03	-0.13413E 04	-0.	-0.	1.00
-0.07686E 02	-0.40182E 03	-0.39372E 03	-0.14693E 04	-0.	-0.	1.00
-0.17040E 03	-0.31481E 03	-0.71632E 03	-0.10103E 04	-0.	-0.	1.00
-0.40766E 03	-0.44464E 02	-0.15157E 04	-0.45774E 02	-0.	-0.	1.00
-0.40553E 03	0.10699E 03	-0.16147E 04	0.49392E 03	-0.	0.	1.00
-0.36223E 03	0.17051E 03	-0.11241E 04	0.40097E 03	-0.	0.	1.00
-0.11975E 03	0.11104E 03	-0.34088E 03	0.33648E 03	-0.	0.	1.00
-0.71877E 02	0.97544E 02	-0.18770E 03	0.27466E 03	-0.	0.	1.00
-0.46094E 02	0.89608E 02	-0.11287E 03	0.17780E 03	-0.	0.	1.00
-0.30070E 02	0.85379E 02	-0.74624E 02	0.11631E 03	-0.	0.	1.00
-0.18259E 02	0.85926E 02	-0.58672E 02	0.82019E 02	-0.	0.	1.00
-0.11848E 02	0.93029E 02	-0.83442E 02	0.86987E 02	-0.	0.	1.00
-0.49112E 01	0.96563E 02	-0.76428E 02	0.67019E 02	-0.	0.	1.00
0.79364E 01	0.97221E 02	-0.77510E 02	0.59233E 02	-0.	0.	1.00
0.16314E 02	0.96724E 02	-0.40500E 02	0.57577E 02	-0.	0.	1.00
0.20197E 02	0.91623E 02	-0.98911E 02	0.71148E 02	-0.	0.	1.00
0.28205E 02	0.84825E 02	-0.11755E 03	0.94304E 02	-0.	0.	1.00
0.30800E 02	0.87224E 02	-0.11170E 03	0.94983E 02	-0.	0.	1.00
0.29496E 02	0.95293E 02	-0.84988E 02	0.74559E 02	-0.	0.	1.00
0.36266E 02	0.10757E 03	-0.79607E 02	0.46886E 02	-0.	0.	1.00
0.65852E 02	0.10666E 03	-0.10917E 03	0.43512E 02	-0.	0.	1.00
0.19612E 03	-0.13261E 02	-0.15902E 03	0.21375E 01	-0.	-0.	1.00
0.17838E 03	-0.26827E 02	-0.23245E 03	0.21506E 03	-0.	-0.	1.00
0.75311E 01	0.11346E 02	0.22371E 02	0.18451E 03	-0.	-0.	1.00
0.51209E 01	0.47821E 02	0.37646E 02	0.18173E 03	-0.	-0.	1.00
0.21322E 02	0.75985E 02	0.51011E 02	0.19243E 03	-0.	-0.	1.00
0.467E 02	0.89867E 02	0.71164E 02	0.20092E 03	-0.	-0.	1.00
0.707E 02	0.10414E 03	0.93279E 02	0.19993E 03	-0.	-0.	1.00
0.15033E 03	0.32819E 02	0.16767E 03	0.10581E 03	-0.	-0.	1.00
0.25798E 03	-0.19268E 03	0.25553E 03	-0.28114E 02	-0.	-0.	1.00
0.14869E 03	-0.21570E 03	0.38874E 02	-0.35958E 02	-0.	-0.	1.00
0.10091E 03	-0.22697E 03	0.12440E 03	-0.87696E 02	-0.	-0.	1.00
0.35661E 02	-0.14469E 03	0.43510E 02	-0.43237E 02	-0.	-0.	1.00
-0.58456E 02	-0.75612E 02	0.11498E 03	-0.25820E 01	-0.	-0.	1.00
-0.57976E 02	-0.49976E 02	0.87771E 02	-0.12597E 02	-0.	-0.	1.00
-0.50956E 02	-0.33437E 02	0.64794E 02	-0.16936E 02	-0.	-0.	1.00
-0.44018E 02	-0.19654E 02	0.66982E 02	-0.20689E 02	-0.	-0.	1.00
-0.43621E 02	-0.12295E 02	0.28227E 02	-0.21220E 02	-0.	-0.	1.00
-0.46140E 02	-0.71800E 01	0.14621E 02	-0.18972E 02	-0.	-0.	1.00
-0.49380E 02	0.13853E 02	0.34529E 01	0.25395E 01	-0.	-0.	1.00
-0.54696E 02	0.23633E 02	-0.10687E 02	0.14755E 02	-0.	-0.	1.00
-0.50699E 02	0.25984E 02	-0.82812E 01	0.18381E 02	-0.	-0.	1.00
-0.17273E 02	0.12101E 02	0.30512E 02	-0.30969E 01	-0.	-0.	1.00
-0.12780E 02	0.77928E 01	0.331.3E 02	-0.12940E 02	-0.	-0.	1.00
-0.14123E 02	0.75495E 01	0.25541E 02	-0.16341E 02	-0.	-0.	1.00
-0.14089E 02	0.78174E 01	0.18.07E 02	-0.17001E 02	-0.	-0.	1.00
-0.13001E 02	0.45373E 01	0.14196E 02	-0.15583E 02	-0.	-0.	1.00
-0.10766E 02	0.56913E 01	0.47009E 01	-0.14667E 02	-0.	-0.	1.00
-0.10184E 02	0.45190E 01	0.92537E 01	-0.13975E 02	-0.	-0.	1.00
-0.10087E 02	0.31225E 01	0.89962E 01	-0.13037E 02	-0.	-0.	1.00
-0.10561E 02	0.384.9E 01	0.91907E 01	-0.14407E 02	-0.	-0.	1.00
-0.17239E 02	0.97290E 01	0.11885E 02	-0.16462E 02	-0.	-0.	1.00
-0.15966E 02	0.11746E 02	0.75824E 01	-0.16396E 02	-0.	-0.	1.00
-0.13647E 02	0.13694E 02	0.40058E 01	-0.13903E 02	-0.	-0.	1.00
-0.36417E 01	0.14435E 02	-0.60244E 00	-0.11334E 02	-0.	-0.	1.00
-0.61107E 01	0.14714E 02	-0.32339E 01	-0.67283E 01	-0.	-0.	1.00
-0.75921E 01	0.12040E 02	-0.64070E 01	-0.16090E 01	-0.	-0.	1.00
0.52006E 01	0.73488E 01	-0.68379E 01	0.19677E 01	0.	0.	1.00
0.91311E 01	0.20057E 01	-0.42096E 01	0.33020E 01	0.	0.	1.00
0.10648E 02	-0.28879E 01	-0.11278E 01	0.22374E 01	-0.	-0.	1.00
0.34745E 01	-0.64974E 01	0.18304E 01	-0.20503E 00	0.	-0.	1.00
0.65287E 01	-0.80264E 01	0.50311E 01	-0.28541E 01	0.	-0.	1.00
0.25512E 01	-0.77335E 01	0.24030E 01	-0.45381E 01	0.	-0.	1.00
-0.12972E 01	0.	0.11744E 00	0.	-0.	-0.	1.00

Table XV --- Continued

(PSI/PPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 15 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMISPAN: 40.06 SEGMENT NUMBER 107

INCREMENTAL BEND STRESS		INCREMENTAL AXIAL STRESS		FREQUENCY CPS
REAL	IMAGINARY	REAL	IMAGINARY	
-0.04903E-01	0.71707E 02	0.10671E 01	-0.23036E 03	0.30
0.40004E 02	0.61323E 02	-0.15429E 03	-0.20674E 03	0.35
0.80023E 02	0.18141E 02	-0.28956E 03	-0.42655E 02	0.40
0.12117E 03	-0.92901E 01	-0.37259E 03	0.91270E 02	0.45
0.10714E 03	-0.32463E 02	-0.36123E 03	0.11395E 03	0.50
0.04591E 02	-0.44720E 02	-0.31726E 03	0.13958E 03	0.55
0.03564E 02	-0.54230E 02	-0.28331E 03	0.19582E 03	0.60
0.11117E 02	-0.64027E 02	-0.26151E 03	0.23302E 03	0.65
0.73623E 02	-0.74292E 02	-0.24658E 03	0.27849E 03	0.70
0.71699E 02	-0.11851E 03	-0.23595E 03	0.42658E 03	0.75
0.70455E 02	-0.19038E 03	-0.21304E 03	0.66204E 03	0.80
0.59904E 02	-0.24886E 03	-0.15210E 03	0.84379E 03	0.85
0.36214E 02	-0.31807E 03	-0.52991E 02	0.10467E 04	0.90
-0.18887E 02	-0.35531E 03	0.15079E 03	0.11462E 04	0.95
-0.73177E 02	-0.38142E 03	0.33811E 03	0.11992E 04	1.00
-0.15598E 01	-0.30200E 03	0.61205E 03	0.06337E 03	1.05
-0.37946E 03	-0.47942E 02	0.12931E 04	0.37482E 02	1.10
-0.43137E 03	0.96061E 02	0.13197E 04	-0.37876E 02	1.15
-0.32286E 03	0.12073E 03	0.06647E 03	-0.34892E 03	1.20
-0.11748E 03	0.10294E 03	0.29126E 03	-0.26015E 03	1.25
-0.60888E 02	0.90529E 02	0.16038E 03	-0.19746E 03	1.30
-0.43528E 02	0.83204E 02	0.96433E 02	-0.14337E 03	1.35
-0.28166E 02	0.74240E 02	0.63761E 02	-0.99383E 02	1.40
-0.16717E 02	0.74222E 02	0.50131E 04	-0.70880E 02	1.45
-0.10193E 02	0.63323E 02	0.71246E 02	-0.74324E 02	1.50
-0.31319E 01	0.88129E 02	0.65302E 02	-0.57263E 02	1.55
0.75040E 01	0.84431E 02	0.66227E 02	-0.49774E 02	1.60
0.14371E 02	0.87000E 02	0.77326E 02	-0.49196E 02	1.65
0.17698E 02	0.84172E 02	0.86017E 02	-0.60791E 02	1.70
0.24526E 02	0.80294E 02	0.10044E 03	-0.82285E 02	1.75
0.25734E 02	0.84412E 02	0.95439E 02	-0.81156E 02	1.80
0.26670E 02	0.92077E 02	0.72617E 02	-0.63706E 02	1.85
0.34918E 02	0.10295E 03	0.48010E 02	-0.39377E 02	1.90
0.65044E 02	0.10103E 03	0.93276E 02	-0.38887E 02	1.95
0.10469E 03	-0.17763E 02	0.13587E 03	-0.18248E 03	2.00
0.17339E 03	-0.29493E 02	0.19861E 03	-0.18376E 03	2.05
0.67173E 01	0.6A228E 01	-0.39283E 02	-0.13765E 03	2.10
0.47146E 01	0.40020E 02	-0.32166E 02	-0.15329E 03	2.15
0.19434E 02	0.63533E 02	-0.43585E 02	-0.16442E 03	2.20
0.42423E 02	0.77773E 02	-0.60805E 02	-0.17167E 03	2.25
0.64690E 02	0.91010E 02	-0.79695E 02	-0.17083E 03	2.30
0.13596E 03	0.78895E 02	-0.14326E 03	-0.90406E 02	2.35
0.23344E 03	-0.18190E 03	-0.21833E 03	0.24021E 02	2.40
0.14574E 03	-0.21045E 03	-0.33216E 02	-0.30722E 02	2.45
0.10007E 03	-0.22572E 03	-0.10629E 02	-0.74879E 02	2.50
0.15625E 02	-0.14012E 03	-0.37183E 02	-0.36943E 02	2.55
-0.65914E 02	-0.69218E 02	-0.99948E 02	0.22041E 01	2.60
-0.61337E 02	-0.43994E 02	-0.74995E 02	0.10392E 02	2.65
-0.42110E 02	-0.28084E 02	-0.33362E 02	0.14669E 02	2.70
-0.45395E 02	-0.14977E 02	-0.40148E 02	0.17677E 02	2.75
-0.40857E 02	-0.84865E 01	-0.24118E 02	0.18131E 02	2.80
-0.40049E 02	-0.47336E 01	-0.12493E 02	0.16211E 02	2.85
-0.40544E 02	0.73882E 01	-0.46381E 01	-0.21699E 01	2.90
-0.41078E 02	0.12512E 02	0.91318E 01	-0.12607E 02	2.95
-0.34523E 02	0.14125E 02	0.70737E 01	-0.15706E 02	3.00
-0.22051E 02	0.82321E 01	-0.26079E 02	0.26461E 01	3.05
-0.19244E 02	0.73037E 01	-0.26414E 02	0.11057E 02	3.10
-0.18951E 02	0.81940E 01	-0.21823E 02	0.13962E 02	3.15
-0.17951E 02	0.89575E 01	-0.13898E 02	0.14526E 02	3.20
-0.16427E 02	0.91622E 01	-0.12130E 02	0.13313E 02	3.25
-0.14588E 02	0.89938E 01	-0.83649E 01	0.12703E 02	3.30
-0.15069E 02	0.87353E 01	-0.79067E 01	0.11940E 02	3.35
-0.14960E 02	0.86372E 01	-0.76866E 01	0.11140E 02	3.40
-0.15049E 02	0.96028E 01	-0.78320E 01	0.12310E 02	3.45
-0.14686E 02	0.12237E 02	-0.10155E 02	0.14493E 02	3.50
-0.14573E 02	0.13455E 02	-0.64786E 01	0.14009E 02	3.55
-0.12478E 02	0.14763E 02	-0.34227E 01	0.11880E 02	3.60
-0.85533E 01	0.15110E 02	0.31474E 00	0.96840E 01	3.65
-0.50557E 01	0.14350E 02	0.27632E 01	0.57489E 01	3.70
0.47199E 00	0.11484E 02	0.34741E 01	0.13748E 01	3.75
0.60968E 01	0.66956E 01	0.38425E 01	-0.14212E 01	3.80
0.95328E 01	0.11647E 01	0.33968E 01	-0.28213E 01	3.85
0.10644E 02	-0.13034E 01	-0.96338E 00	-0.19117E 01	3.90
0.91100E 01	-0.64079E 01	-0.15619E 01	0.17937E 00	3.95
0.61157E 01	-0.78380E 01	-0.25899E 01	0.24384E 01	4.00
0.22178E 01	-0.74044E 01	-0.20332E 01	0.38779E 01	4.05
-0.14018E 01	0.	-0.10034E 00	0.	4.10

Table XV -- Continued

(PSI/PS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 15 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

BODY BALANCE STATION: 540 SEGMENT NUMBER: 17

INCREMENTAL SHEAR STRESS						FREQUENCY CPS
REAL	IMAGINARY					
-0.41556E-01	-0.11091E 01	0.	-0.	0.	-0.	0.10
-0.12170E 01	-0.77090E 00	0.	-0.	0.	-0.	0.20
-0.18598E 01	0.91125E-01	0.	-0.	0.	-0.	0.30
-0.19006E 01	0.50408E 00	-0.	-0.	-0.	-0.	0.40
-0.17374E 01	0.74625E 00	-0.	-0.	-0.	-0.	0.50
-0.13511E 01	0.80593E 00	-0.	-0.	-0.	-0.	0.60
-0.11170E 01	0.82421E 00	-0.	-0.	-0.	-0.	0.70
-0.98007E 00	0.84129E 00	-0.	-0.	-0.	-0.	0.80
-0.90381E 00	0.87597E 00	-0.	-0.	-0.	-0.	0.90
-0.87077E 00	0.10753E 01	-0.	-0.	-0.	-0.	1.00
-0.90624E 00	0.15150E 01	-0.	-0.	-0.	-0.	1.10
-0.56810E 00	0.19134E 01	0.	-0.	0.	-0.	1.20
-0.92366E 00	0.24331E 01	0.	-0.	0.	-0.	1.30
-0.69876E 00	0.27529E 01	-0.	-0.	-0.	-0.	1.40
-0.42273E-00	0.30482E 01	-0.	-0.	-0.	-0.	1.50
0.49574E-01	0.29039E 01	-0.	-0.	-0.	-0.	1.60
0.15715E 01	0.13965E 01	-0.	-0.	-0.	-0.	1.70
0.23197E 01	0.31194E-00	-0.	-0.	-0.	-0.	1.80
0.18053E 01	-0.14333E-00	-0.	0.	-0.	0.	1.90
0.45002E-00	-0.65090E-01	-0.	0.	-0.	0.	2.00
0.75492E-01	0.30583E-01	-0.	0.	-0.	0.	2.10
-0.17073E-02	0.13103E-00	-0.	0.	-0.	0.	2.20
-0.36177E-00	0.25075E-00	-0.	-0.	-0.	-0.	2.30
-0.53919E 00	0.45146E-00	0.	-0.	0.	-0.	2.40
-0.70218E 00	0.56544E 00	0.	-0.	0.	-0.	2.50
-0.73011E 00	0.70344E 00	0.	-0.	0.	-0.	2.60
-0.73506E 00	0.79091E 00	0.	-0.	0.	-0.	2.70
-0.66940E 00	0.81300E 00	0.	-0.	0.	-0.	2.80
-0.61444E 00	0.73339E 00	0.	-0.	0.	-0.	2.90
-0.52446E-00	0.42470E-00	0.	-0.	0.	-0.	3.00
-0.41417E-00	0.20201E-00	0.	-0.	0.	-0.	3.10
-0.76705E 00	0.73893E-00	0.	-0.	0.	-0.	3.20
-0.11547E 01	0.45288E-00	0.	-0.	0.	-0.	3.30
-0.17480E 01	0.77022E 00	0.	-0.	0.	-0.	3.40
-0.23210E 01	0.28963E 01	0.	-0.	0.	-0.	3.50
-0.31240E 01	0.46034E 01	0.	-0.	0.	-0.	3.60
-0.87678E 00	0.57242E 01	0.	-0.	0.	-0.	3.70
-0.43960E-00	0.79344E 01	0.	-0.	0.	-0.	3.80
0.77891E 00	0.10005E 02	-0.	-0.	-0.	-0.	3.90
0.71924E 01	0.11310E 02	-0.	-0.	-0.	-0.	4.00
0.49549E 01	0.12024E 02	-0.	-0.	-0.	-0.	4.10
0.12111E 02	0.39513E 01	-0.	-0.	-0.	-0.	4.20
0.20749E 02	-0.91543E 01	-0.	0.	-0.	0.	4.30
0.21839E 01	-0.42554E 01	-0.	0.	-0.	0.	4.40
-0.54691E 00	-0.18375E-00	0.	-0.	0.	-0.	4.50
0.95790E 00	-0.18467E 01	-0.	-0.	-0.	-0.	4.60
0.52653E 01	-0.36728E 01	-0.	0.	-0.	0.	4.70
0.31931E 01	-0.34853E 01	-0.	0.	-0.	0.	4.80
0.17466E 01	-0.29987E 01	-0.	0.	-0.	0.	4.90
0.77809E 00	-0.24141E 01	-0.	0.	-0.	0.	5.00
0.72858E-01	-0.21506E 01	-0.	0.	-0.	0.	5.10
-0.13809E-00	-0.20910E 01	-0.	0.	-0.	0.	5.20
-0.16757E-00	-0.29517E 01	-0.	0.	-0.	0.	5.30
-0.19904E-00	-0.25313E 01	-0.	0.	-0.	0.	5.40
-0.34072E-00	-0.23803E 01	-0.	0.	-0.	0.	5.50
-0.13132E 01	-0.18525E 01	0.	0.	0.	0.	5.60
-0.15916E 01	-0.15331E 01	0.	0.	0.	0.	5.70
-0.16658E 01	-0.12681E 01	0.	0.	0.	0.	5.80
-0.24453E 01	-0.87254E 00	0.	0.	0.	0.	5.90
-0.33136E 01	0.10737E 01	0.	-0.	0.	-0.	6.00
-0.51447E 01	0.19715E 01	0.	-0.	0.	-0.	6.10
-0.54273E 01	0.31694E 01	0.	-0.	0.	-0.	6.20
-0.54653E 01	0.45877E 01	0.	-0.	0.	-0.	6.30
-0.50013E 01	0.44601E 01	0.	-0.	0.	-0.	6.40
0.14277E 01	0.91832E 00	-0.	-0.	-0.	-0.	6.50
0.15643E 01	0.14376E-02	-0.	-0.	-0.	-0.	6.60
0.84111E 00	-0.12448E-00	-0.	-0.	-0.	-0.	6.70
0.25744E-00	-0.17172E-00	-0.	-0.	-0.	-0.	6.80
0.61850E-01	-0.54738E-01	-0.	-0.	-0.	-0.	6.90
0.21216E-01	-0.37744E-01	-0.	-0.	-0.	-0.	7.00
0.12324E-03	-0.62769E-01	-0.	-0.	-0.	-0.	7.10
0.17711E-01	-0.96635E-01	-0.	-0.	-0.	-0.	7.20
0.29369E-02	-0.10807E-00	-0.	0.	-0.	0.	7.30
-0.39261E-01	-0.85250E-01	-0.	0.	-0.	0.	7.40
-0.74680E-01	-0.48494E-01	-0.	0.	-0.	0.	7.50
-0.38862E-01	-0.17083E-01	-0.	0.	-0.	0.	7.60
-0.75923E-01	0.	-0.	0.	-0.	0.	7.70

Table XV --- Continued

(PSI/PPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 15 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

BODY BALANCE STATION: 820 SEGMENT NUMBER 1

INCREMENTAL AXIAL STRESS

REAL IMAGINARY

0.	0.	0.14020E 01	0.11502E 03	0.	0.	0.10
0.	0.	0.91791E 02	0.90344E 02	0.	0.	0.20
0.	0.	0.15504E 03	0.15400E 02	0.	0.	0.30
0.	-0.	0.10550E 03	-0.27779E 02	0.	-0.	0.40
0.	-0.	0.17321E 03	-0.61520E 02	0.	-0.	0.50
0.	-0.	0.14671E 03	-0.77793E 02	0.	-0.	0.60
0.	-0.	0.12095E 03	-0.90059E 02	0.	-0.	0.70
0.	-0.	0.11419E 03	-0.10295E 03	0.	-0.	0.80
0.	-0.	0.11194E 03	-0.11940E 03	0.	-0.	0.90
0.	-0.	0.10041E 03	-0.17704E 03	0.	-0.	1.00
0.	-0.	0.10547E 03	-0.27270E 03	0.	-0.	1.20
0.	-0.	0.00204E 02	-0.34035E 03	0.	-0.	1.30
0.	-0.	0.53972E 02	-0.43520E 03	0.	-0.	1.40
-0.	-0.	-0.21704E 02	-0.46013E 03	-0.	-0.	1.50
-0.	-0.	-0.94391E 02	-0.50046E 03	-0.	-0.	1.60
-0.	-0.	-0.20201E 03	-0.39070E 03	-0.	-0.	1.70
-0.	-0.	-0.40505E 03	-0.60010E 02	-0.	-0.	1.80
-0.	0.	-0.53049E 03	0.11324E 03	-0.	0.	1.90
-0.	0.	-0.37041E 03	0.11704E 03	-0.	0.	2.00
-0.	0.	-0.10447E 03	0.02113E 02	-0.	0.	2.10
-0.	0.	-0.46515E 02	0.52419E 02	-0.	0.	2.20
-0.	0.	-0.15921E 02	0.26090E 02	-0.	0.	2.30
-0.	0.	0.16612E 01	0.06539E 00	0.	0.	2.40
-0.	-0.	0.11133E 01	-0.25290E 02	0.	-0.	2.50
-0.	-0.	0.41003E 01	-0.33160E 02	0.	-0.	2.60
-0.	-0.	0.33616E 01	-0.51903E 02	0.	-0.	2.70
-0.	-0.	-0.54249E 01	-0.61054E 02	-0.	-0.	2.80
-0.	-0.	-0.21615E 02	-0.62007E 02	-0.	-0.	2.90
-0.	-0.	-0.31440E 02	-0.46200E 02	-0.	-0.	3.00
-0.	-0.	-0.50657E 02	-0.90320E 01	-0.	-0.	3.10
-0.	0.	-0.57063E 02	0.25102E 01	-0.	0.	3.20
-0.	-0.	-0.22123E 02	-0.13904E 02	-0.	-0.	3.30
-0.	-0.	-0.20605E 01	-0.47191E 02	-0.	-0.	3.40
-0.	-0.	-0.47430E 01	-0.63047E 02	-0.	-0.	3.50
-0.	-0.	-0.27224E 02	-0.47920E 01	-0.	-0.	3.60
-0.	-0.	-0.00642E 02	-0.46099E 02	-0.	-0.	3.70
-0.	-0.	0.99613E 02	-0.12611E 03	0.	-0.	3.80
-0.	-0.	0.60151E 02	-0.23512E 03	0.	-0.	3.90
-0.	-0.	0.19306E 02	-0.32541E 03	0.	-0.	4.00
-0.	-0.	-0.56971E 02	-0.30009E 03	-0.	-0.	4.10
-0.	-0.	-0.14021E 03	-0.41035E 03	-0.	-0.	4.20
-0.	-0.	-0.41500E 03	-0.95400E 02	-0.	-0.	4.30
-0.	0.	-0.73703E 03	0.34171E 03	-0.	0.	4.40
-0.	0.	0.10019E 02	0.11410E 03	0.	0.	4.50
-0.	0.	0.10402E 03	-0.63200E 02	0.	-0.	4.60
-0.	0.	0.13207E 01	0.50239E 02	0.	0.	4.70
-0.	0.	-0.22210E 03	0.15045E 03	-0.	0.	4.80
-0.	0.	-0.12256E 03	0.15279E 03	-0.	0.	4.90
-0.	0.	-0.54074E 02	0.13011E 03	-0.	0.	5.00
-0.	0.	-0.10150E 02	0.10090E 03	-0.	0.	5.10
0.	0.	0.24033E 02	0.04370E 02	0.	0.	5.20
0.	0.	0.42422E 02	0.74930E 02	0.	0.	5.30
0.	0.	0.52274E 02	0.44714E 02	0.	0.	5.40
0.	0.	0.67960E 02	0.31250E 02	0.	0.	5.50
0.	0.	0.65695E 02	0.21490E 02	0.	0.	5.60
0.	0.	0.71126E 02	0.34112E 02	0.	0.	5.70
0.	0.	0.30421E 02	0.34705E 02	0.	0.	5.80
0.	0.	0.40272E 02	0.29464E 02	0.	0.	5.90
0.	0.	0.53146E 02	-0.21184E 02	0.	0.	6.00
0.	-0.	0.68493E 02	-0.12977E 02	0.	-0.	6.10
0.	-0.	0.90490E 02	-0.27972E 02	0.	-0.	6.20
0.	-0.	0.10297E 03	-0.47704E 04	0.	-0.	6.30
0.	-0.	0.10341E 03	-0.71000E 02	0.	-0.	6.40
0.	-0.	0.99643E 02	-0.77724E 02	0.	-0.	6.50
0.	-0.	-0.06335E 01	-0.14002E 02	-0.	-0.	6.60
-0.	-0.	-0.10729E 02	-0.21031E 01	-0.	-0.	6.70
-0.	-0.	0.12145E 01	-0.47900E 01	0.	-0.	6.80
-0.	-0.	0.63143E 01	-0.72223E 01	0.	-0.	6.90
-0.	-0.	0.50231E 01	-0.96245E 01	0.	-0.	7.00
-0.	-0.	0.45700E 00	-0.05320E 01	-0.	-0.	7.10
-0.	-0.	-0.40714E 01	-0.43040E 01	-0.	-0.	7.20
-0.	-0.	-0.09644E 01	0.12324E 00	-0.	-0.	7.30
-0.	0.	-0.04205E 01	0.26350E 01	-0.	0.	7.40
-0.	0.	-0.70044E 01	0.34723E 01	-0.	0.	7.50
-0.	0.	-0.97600E 01	0.34300E 01	-0.	0.	7.60
-0.	0.	-0.41274E 01	9.27060E 01	-0.	0.	7.70
-0.	0.	-0.32340E 01	0.	-0.	0.	7.80

Table XV - - - Continued

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUT-OFF FREQUENCY: 20 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMISPAN: 27 SECTION NUMBER 10

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY CPS
REAL	IMAGINARY	REAL	IMAGINARY			
0.84271E-01	0.35385E-02	-0.80681E-01	0.30565E-05	0.	-0.	0.10
0.24347E-02	0.29947E-02	0.19898E-03	0.26210E-05	-0.	-0.	0.20
0.44132E-02	0.83452E-01	0.37020E-03	0.78906E-02	-0.	-0.	0.30
0.55397E-02	-0.51332E-01	0.47339E-03	-0.59261E-02	-0.	0.	0.40
0.53094E-02	-0.16505E-02	0.45756E-03	-0.14192E-05	-0.	0.	0.50
0.46190E-02	-0.22434E-02	0.42073E-03	-0.19748E-03	-0.	0.	0.60
0.41253E-02	-0.27016E-02	0.35800E-03	-0.24396E-05	-0.	0.	0.70
0.38231E-02	-0.31273E-02	0.32986E-03	-0.28530E-03	-0.	0.	0.80
0.34521E-02	-0.37815E-02	0.31144E-03	-0.33952E-05	-0.	0.	0.90
0.35926E-02	-0.56253E-02	0.25897E-03	-0.51720E-05	-0.	0.	1.00
0.36853E-02	-0.67180E-02	0.27763E-03	-0.80276E-03	-0.	0.	1.20
0.33495E-02	-0.12897E-05	0.20963E-05	-0.10256E-04	0.	0.	1.30
0.22849E-02	-0.16771E-03	0.96540E-02	-0.12780E-04	0.	-0.	1.40
-0.42896E-01	-0.18946E-03	-0.14204E-03	-0.14050E-04	0.	-0.	1.50
-0.32343E-02	-0.22625E-03	-0.36551E-03	-0.14789E-04	0.	-0.	1.60
-0.75495E-02	-0.17111E-03	-0.69482E-03	-0.10976E-04	0.	-0.	1.70
-0.39911E-03	-0.35926E-02	-0.15337E-04	-0.30146E-03	-0.	-0.	1.75
-0.23925E-03	0.46462E-02	-0.16662E-04	0.40830E-03	-0.	0.	1.80
-0.18287E-03	0.70094E-02	-0.11743E-04	0.40870E-03	-0.	0.	1.85
-0.70840E-02	0.64437E-02	-0.56373E-03	0.30779E-03	-0.	0.	1.90
-0.45308E-02	0.62249E-02	-0.20150E-03	0.25180E-05	-0.	0.	1.95
-0.30219E-02	0.83714E-02	-0.17059E-03	0.17513E-03	-0.	0.	2.00
-0.26436E-02	0.65940E-02	-0.77273E-02	0.12795E-03	-0.	0.	2.10
-0.56218E-01	0.74499E-02	-0.54149E-02	0.87179E-02	-0.	0.	2.20
0.34082E-02	0.70093E-02	-0.52018E-02	0.70001E-02	0.	0.	2.30
0.17233E-02	0.27041E-02	-0.52413E-02	0.44193E-02	0.	0.	2.35
0.24472E-02	0.79822E-02	-0.65530E-02	0.56245E-02	0.	0.	2.40
0.34061E-02	0.79724E-02	-0.85646E-02	0.35754E-02	0.	0.	2.45
0.39009E-02	0.72921E-02	-0.97472E-02	0.56486E-02	0.	0.	2.50
0.50533E-02	0.63352E-02	-0.12910E-03	0.10052E-03	0.	0.	2.55
0.50181E-02	0.65314E-02	-0.12646E-05	0.11476E-03	0.	0.	2.60
0.45535E-02	0.84011E-02	-0.84240E-02	0.97085E-02	0.	0.	2.65
0.54631E-02	0.10592E-03	-0.63312E-02	0.66091E-02	0.	0.	2.70
0.10102E-03	0.10454E-03	-0.48845E-02	0.56672E-02	0.	0.	2.75
0.14764E-03	-0.10530E-03	-0.86245E-02	0.14805E-03	0.	-0.	2.80
0.29234E-03	-0.36349E-03	-0.14415E-03	0.14327E-03	0.	-0.	2.85
-0.28309E-02	-0.11812E-03	0.16352E-02	0.11391E-03	-0.	-0.	2.90
-0.56132E-02	-0.93940E-02	0.26914E-02	0.96725E-02	-0.	-0.	2.95
-0.23322E-02	-0.85284E-02	0.30791E-02	0.90310E-02	-0.	-0.	3.00
-0.81036E-02	-0.83382E-02	0.33523E-02	0.87505E-02	-0.	-0.	3.05
-0.88239E-02	-0.82515E-02	0.36221E-02	0.80885E-02	-0.	-0.	3.10
-0.10972E-03	-0.71410E-02	0.45080E-02	0.62441E-02	-0.	-0.	3.15
-0.5204E-03	0.89707E-02	0.53823E-02	0.45047E-02	-0.	0.	3.20
-0.20169E-03	0.16242E-03	0.10523E-02	0.61216E-02	-0.	0.	3.25
-0.16455E-03	0.21643E-03	0.47220E-01	0.77443E-02	-0.	0.	3.30
-0.10039E-02	0.57863E-02	0.14542E-02	0.45131E-02	-0.	0.	3.35
0.75812E-02	0.12314E-02	0.41709E-02	0.42118E-02	-0.	-0.	3.40
0.47726E-02	-0.54085E-01	0.47620E-02	0.32345E-02	0.	-0.	3.45
0.24912E-02	-0.30415E-02	0.44216E-02	0.25349E-02	0.	-0.	3.50
0.30327E-02	-0.10390E-02	0.42424E-02	0.39653E-02	0.	-0.	3.55
0.39707E-02	-0.92066E-01	0.47327E-02	0.13968E-02	-0.	-0.	3.60
-0.35286E-01	-0.84821E-01	0.60177E-02	0.75723E-01	-0.	-0.	3.65
-0.49824E-01	-0.62779E-01	0.73053E-02	-0.53518E-02	-0.	0.	3.70
-0.19914E-01	-0.61727E-01	0.95124E-02	-0.82493E-02	-0.	0.	3.75
-0.32581E-01	-0.45739E-01	0.94297E-02	-0.85851E-02	-0.	0.	3.80
-0.70801E-01	-0.47739E-01	-0.12810E-02	-0.36016E-02	0.	0.	3.85
-0.78159E-01	-0.71739E-01	-0.30220E-02	-0.15078E-02	0.	-0.	3.90
-0.91329E-01	-0.71739E-01	-0.22972E-02	-0.77192E-01	-0.	-0.	3.95
-0.10893E-02	-0.71739E-01	-0.20631E-02	-0.36687E-01	-0.	-0.	4.00
-0.11055E-02	0.39635E-01	-0.23959E-02	0.10526E-02	-0.	-0.	4.05
-0.17384E-02	0.60353E-01	-0.35203E-02	0.16962E-02	-0.	0.	4.10
-0.18059E-02	0.89105E-01	-0.37039E-02	0.25569E-02	-0.	0.	4.15
-0.18167E-02	0.12310E-02	-0.37363E-02	0.35800E-02	-0.	0.	4.20
-0.17110E-02	0.13721E-02	-0.33715E-02	0.58970E-02	-0.	0.	4.25
-0.20819E-01	0.49234E-01	0.13415E-02	0.93671E-01	-0.	0.	4.30
-0.14308E-01	0.36368E-01	0.15746E-02	0.21754E-01	-0.	0.	4.35
-0.27600E-01	0.38199E-01	0.11146E-02	0.13424E-00	-0.	0.	4.40
-0.12940E-01	0.43904E-01	0.73215E-01	-0.86774E-00	-0.	0.	4.45
-0.28731E-01	0.51455E-01	0.58944E-01	-0.17366E-01	-0.	0.	4.50
-0.11105E-01	0.48479E-01	0.42603E-01	-0.25299E-01	-0.	0.	4.55
0.81689E-01	0.37366E-01	0.35492E-01	-0.28575E-01	-0.	0.	4.60
0.74284E-01	0.15723E-01	0.22131E-01	-0.30441E-01	0.	0.	4.65
0.36104E-01	0.23041E-00	0.17844E-01	-0.28345E-01	0.	0.	4.70
0.37481E-01	-0.12214E-01	0.26049E-00	-0.24430E-01	0.	-0.	4.75
0.31242E-01	-0.17871E-01	-0.54565E-00	-0.18949E-01	0.	-0.	4.80
0.21401E-01	-0.25813E-01	-0.10458E-01	-0.12299E-01	0.	-0.	4.85
0.47844E-00	-0.25394E-01	-0.14243E-01	-0.66189E-00	0.	-0.	4.90
-0.33647E-00	-0.20754E-01	-0.35827E-01	-0.19647E-01	-0.	-0.	4.95
-0.10099E-01	-0.13940E-01	-0.14200E-01	0.62904E-00	-0.	-0.	5.00
-0.34059E-01	-0.64391E-00	-0.35614E-01	0.12831E-01	-0.	0.	5.05
-0.18238E-01	0.77286E-01	-0.12944E-01	0.39489E-01	-0.	0.	5.10
-0.12591E-01	0.	-0.78691E-00	0.	-0.	0.	5.15

Table XV -- Continued

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 20 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMISPAN: 27 SEGMENT NUMBER 14

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY CPS
REAL	IMAGINARY	REAL	IMAGINARY			
0.67963E-02	0.10709E 03	0.73216E 00	0.27555E 03	0.	-0.	0.15
0.72152E 02	0.51329E 02	0.18057E 03	0.23785E 03	-0.	-0.	0.30
0.13701E 03	0.26474E 02	0.33594E 03	0.71605E 32	-0.	-0.	0.45
0.16670E 03	-0.14494E 02	0.42599E 03	-0.35629E 02	-0.	-0.	0.60
0.16010E 03	-0.49199E 02	0.41525E 03	-0.12879E 03	-0.	-0.	0.75
0.13927E 03	-0.67313E 02	0.36365E 03	-0.17921E 03	-0.	-0.	0.90
0.12394E 03	-0.81121E 02	0.32488E 03	-0.11866E 03	-0.	-0.	1.05
0.11614E 03	-0.95111E 02	0.29934E 03	-0.25891E 03	-0.	-0.	1.20
0.10807E 03	-0.11235E 03	0.28263E 03	-0.30810E 03	-0.	-0.	1.35
0.10451E 03	-0.17053E 03	0.27131E 03	-0.46955E 03	-0.	-0.	1.50
0.10109E 03	-0.26907E 03	0.25152E 03	-0.72869E 03	-0.	-0.	1.65
0.85404E 02	-0.14696E 03	0.19922E 03	-0.93069E 03	0.	-0.	1.80
0.57659E 02	-0.43977E 03	0.87427E 02	-0.11597E 04	0.	-0.	1.95
-0.22229E 02	-0.48954E 03	-0.12890E 03	-0.12750E 04	0.	-0.	2.10
-0.45634E 02	-0.52411E 03	-0.33169E 03	-0.13421E 04	0.	-0.	2.25
-0.20717E 01	-0.41590E 03	-0.63053E 03	-0.99607E 03	0.	-0.	2.40
-0.50773E 03	-0.74567E 02	-0.13914E 04	-0.92016E 02	-0.	-0.	2.55
-0.58304E 03	0.11749E 03	-0.15120E 04	0.37053E 03	-0.	-0.	2.70
-0.42934E 03	0.14758E 03	-0.10656E 04	0.37089E 03	-0.	-0.	2.85
-0.14804E 03	0.12261E 03	0.33008E 03	0.27932E 03	-0.	-0.	3.00
-0.88042E 02	0.10529E 03	-0.18286E 03	0.21035E 03	-0.	-0.	3.15
-0.55979E 02	0.95527E 02	-0.10944E 03	0.15893E 03	-0.	-0.	3.30
-0.35691E 02	0.92228E 02	-0.70124E 02	0.11611E 03	-0.	-0.	3.45
-0.19522E 02	0.87066E 02	-0.49139E 02	0.79113E 02	-0.	-0.	3.60
0.49824E 01	0.81300E 02	-0.47205E 02	0.63524E 02	0.	-0.	3.75
0.82011E 01	0.81872E 02	-0.47745E 02	0.41919E 02	0.	-0.	3.90
0.13072E 02	0.82053E 02	-0.59667E 02	0.32891E 02	0.	-0.	4.05
0.17679E 02	0.81692E 02	-0.77721E 02	0.32446E 02	0.	-0.	4.20
0.19751E 02	0.80379E 02	-0.88654E 02	0.51259E 02	0.	-0.	4.35
0.22460E 02	0.84092E 02	-0.11716E 03	0.91037E 02	0.	-0.	4.50
0.22254E 02	0.97227E 02	-0.11476E 03	0.10414E 03	0.	-0.	4.65
0.30142E 02	0.10558E 03	-0.76446E 02	0.88102E 02	0.	-0.	4.80
0.49325E 02	0.12756E 03	-0.57454E 02	0.59976E 02	0.	-0.	4.95
0.10282E 03	0.11942E 03	-0.62475E 02	0.51429E 02	0.	-0.	5.10
0.17352E 03	-0.10660E 03	-0.87343E 02	0.13435E 03	0.	-0.	5.25
0.30256E 03	-0.17236E 03	-0.13263E 03	0.13002E 03	0.	-0.	5.40
-0.32134E 02	-0.13427E 03	0.14839E 02	0.10337E 03	-0.	-0.	5.55
-0.62833E 02	-0.11983E 03	0.24474E 02	0.87774E 02	-0.	-0.	5.70
-0.84703E 02	-0.12069E 03	0.27943E 02	0.81954E 02	-0.	-0.	5.85
-0.10394E 03	-0.12418E 03	0.30421E 02	0.79409E 02	-0.	-0.	6.00
-0.12094E 03	-0.12836E 03	0.32870E 02	0.73401E 02	-0.	-0.	6.15
-0.17459E 03	-0.86947E 02	0.40909E 02	0.56664E 02	-0.	-0.	6.30
-0.26031E 03	0.16193E 03	0.48843E 02	0.40800E 02	-0.	-0.	6.45
-0.25544E 03	0.24410E 02	0.95496E 01	0.55552E 02	-0.	-0.	6.60
-0.20390E 03	0.29425E 01	0.43305E 01	0.70278E 02	-0.	-0.	6.75
-0.40671E 02	0.15183E 01	0.13196E 02	0.59105E 02	-0.	-0.	6.90
0.45432E 02	0.45470E 02	0.43294E 02	0.38221E 02	0.	-0.	7.05
0.60834E 02	0.15492E 02	0.43214E 02	0.29370E 02	0.	-0.	7.20
0.18280E 02	0.92409E 01	0.40125E 02	0.23003E 02	0.	-0.	7.35
0.24861E 02	0.51220E 01	0.38685E 02	0.16927E 02	0.	-0.	7.50
0.19941E 02	0.25259E 01	0.42944E 02	0.10861E 02	-0.	-0.	7.65
0.25251E 02	-0.15877E 01	0.54609E 02	0.26067E 01	-0.	-0.	7.80
0.32130E 02	-0.33487E 02	0.66294E 02	-0.48567E 02	-0.	-0.	7.95
0.44612E 02	-0.50052E 02	0.86322E 02	-0.74860E 02	-0.	-0.	8.10
0.38374E 02	-0.51639E 02	0.76497E 02	-0.77907E 02	-0.	-0.	8.25
-0.21209E 02	-0.71753E 02	-0.16162E 02	-0.32684E 02	0.	-0.	8.40
-0.28879E 02	-0.83046E 01	-0.27469E 02	-0.13681E 02	0.	-0.	8.55
-0.24804E 02	-0.27817E 01	-0.20846E 02	-0.70050E 01	-0.	-0.	8.70
-0.23532E 02	0.52690E 00	-0.16723E 02	-0.33293E 01	-0.	-0.	8.85
-0.25752E 02	0.10765E 02	-0.21742E 02	0.95523E 01	-0.	-0.	9.00
-0.33319E 02	0.15106E 02	-0.31946E 02	0.15393E 02	-0.	-0.	9.15
-0.34579E 02	0.21326E 02	-0.33612E 02	0.23204E 02	-0.	-0.	9.30
-0.34680E 02	0.28499E 02	-0.33724E 02	0.32487E 02	-0.	-0.	9.45
-0.32340E 02	0.31503E 02	-0.30596E 02	0.35319E 02	-0.	-0.	9.60
0.42939E -00	0.11871E 02	0.12174E 02	0.85005E 01	-0.	-0.	9.75
0.31109E 01	0.79756E 01	0.14291E 02	0.26797E 01	-0.	-0.	9.90
0.82109E -00	0.63026E 01	0.10115E 02	0.12182E -06	-0.	-0.	10.05
-0.27551E -00	0.59333E 01	0.66895E 01	-0.78745E 00	-0.	-0.	10.20
-0.60816E -01	0.54649E 01	0.53491E 01	-0.15759E 01	-0.	-0.	10.35
0.15682E 01	0.39499E 01	0.38661E 01	-0.21143E 01	-0.	-0.	10.50
0.29902E 01	0.23047E 01	0.32213E 01	-0.75929E 01	-0.	-0.	10.65
0.36000E 01	0.62212E -00	0.20084E 01	-0.27624E 01	0.	-0.	10.80
0.35553E 01	-0.45267E -00	0.11765E 01	-0.25722E 01	0.	-0.	10.95
0.29869E 01	-0.46154E -00	0.23638E -00	-0.22170E 01	0.	-0.	11.10
0.22234E 01	-0.12206E 01	-0.49516E -00	-0.17196E 01	0.	-0.	11.25
0.17172E 01	-0.12542E 01	-0.94902E 00	-0.21161E 01	0.	-0.	11.40
0.13756E 01	-0.14971E 01	-0.12425E 01	-0.60065E 00	0.	-0.	11.55
0.11350E 01	-0.17283E 01	-0.14526E 01	-0.17829E -01	-0.	-0.	11.70
0.86444E 00	-0.20385E 01	-0.14702E 01	0.57086E 00	-0.	-0.	11.85
0.37449E -00	-0.22227E 01	-0.14169E 01	0.11626E 01	-0.	-0.	12.00
-0.26450E -00	-0.20971E 01	-0.11750E 01	0.17686E 01	-0.	-0.	12.15
-0.11484E 01	0.	-0.71110E 00	0.	-0.	-0.	12.30

Table XV-- Continued

(PSI/PS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 20 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMISPAN: 40.06 SEGMENT NUMBER 8

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY CPS
REAL	IMAGINARY	REAL	IMAGINARY			
-0.13427F-00	0.73780E 02	-0.12489E 01	0.27097E 03	0.	0.	0.25
0.49232E 02	0.63168E 02	0.18058F 03	0.24197E 03	0.	0.	0.30
0.50530E 02	0.18492E 02	0.33889E 03	0.73329E 02	0.	0.	0.35
0.11480E 03	-0.95961E 01	0.43606E 03	-0.36597E 02	0.	-0.	0.40
0.11051E 03	-0.33906E 02	0.42277E 03	-0.33356E 03	0.	-0.	0.45
0.56627F 02	-0.46655E 02	0.37331E 03	-0.18676E 03	0.	-0.	0.50
0.68442F 02	-0.56777E 02	0.33216E 03	-0.22938E 03	0.	-0.	0.55
0.80023E 02	-0.67218E 02	0.30607E 03	-0.27272E 03	0.	-0.	0.60
0.76207E 02	-0.80304E 02	0.28859E 03	-0.32593E 03	0.	-0.	0.65
0.74117E 02	-0.12527E 03	0.27612E 03	-0.37483E 03	0.	-0.	0.70
0.72555E 02	-0.20155E 03	0.25167E 03	-0.49926E 03	0.	-0.	0.75
0.60560E 02	-0.26338E 03	0.17801E 03	-0.90754E 03	0.	-0.	0.80
0.34717E 02	-0.33621E 03	0.62049E 02	-0.12251E 04	0.	-0.	0.85
-0.24665E 02	-0.37509E 03	-0.17589E 03	-0.13615E 04	0.	-0.	0.90
-0.87486E 02	-0.40182E 03	-0.39572E 03	-0.34035E 04	0.	-0.	0.95
-0.17080F 03	-0.31481E 02	-0.71632E 03	-0.10105E 04	0.	-0.	1.00
-0.40766E 03	-0.44466E 02	-0.15157E 04	-0.63774E 02	0.	-0.	1.05
-0.46553E 03	0.15459E 03	-0.16147E 04	0.43392E 03	0.	0.	1.10
-0.36223E 03	0.13055E 03	-0.11241E 04	0.40837E 03	0.	0.	1.15
-0.11575E 03	0.11104E 03	-0.34088E 03	0.30440E 03	0.	0.	1.20
-0.71877E 02	0.67544E 02	-0.18770E 03	0.22446E 03	0.	0.	1.25
-0.46054E 02	0.85608E 02	-0.11287E 03	0.16780E 03	0.	0.	1.30
-0.30070E 02	0.85379E 02	-0.74624E 02	0.13651E 03	0.	0.	1.35
-0.18259E 02	0.85926E 02	-0.58672E 02	0.82019E 02	0.	0.	1.40
-0.11848E 02	0.93079E 02	-0.83447E 02	0.86987E 02	0.	0.	1.45
-0.40112F 01	0.65651E 02	-0.76428E 02	0.67019E 02	0.	0.	1.50
0.79344E 01	0.97221E 02	-0.77510E 02	0.58253E 02	0.	0.	1.55
0.16317E 02	0.64724E 02	-0.70500E 02	0.57577E 02	0.	0.	1.60
0.20157E 02	0.61623E 02	-0.98331E 02	0.71148E 02	0.	0.	1.65
0.29205E 02	0.84825E 02	-0.11755E 03	0.96304E 02	0.	0.	1.70
0.30806E 02	0.67224E 02	-0.11170E 03	0.94983E 02	0.	0.	1.75
0.29454E 02	0.95293E 02	-0.84988E 02	0.74559E 02	0.	0.	1.80
0.36266E 02	0.10757E 03	-0.79607E 02	0.46086E 02	0.	0.	1.85
0.65957E 02	0.10666E 03	-0.10917E 03	0.65512E 02	0.	0.	1.90
0.10617E 03	-0.13761E 02	-0.15902E 03	0.21357E 03	0.	-0.	1.95
0.17838F 03	-0.26827E 02	-0.23245E 03	0.21504E 03	0.	-0.	2.00
0.75315E 01	0.11346F 02	0.22571E 02	0.38451E 03	0.	-0.	2.05
0.51209E 01	0.47821E 02	0.37644E 02	0.18175E 03	0.	0.	2.10
0.21327E 02	0.73985E 02	0.51011E 02	0.19243E 03	0.	0.	2.15
0.45044E 02	0.89867E 02	0.71164E 02	0.20092E 03	0.	0.	2.20
0.70777E 02	0.10416E 02	0.95273E 02	0.19993E 03	0.	0.	2.25
0.15039E 03	0.32819F 02	0.16767E 03	0.10581E 03	0.	0.	2.30
0.25759E 03	-0.19768E 03	0.25553F 03	-0.28114E 02	0.	-0.	2.35
0.14869E 03	-0.21570E 03	0.38876E 02	0.35956E 02	0.	-0.	2.40
0.16051E 03	-0.22697E 03	0.12440E 02	0.87636E 02	0.	-0.	2.45
0.38641E 02	-0.14463E 03	0.43518E 02	0.43237E 02	0.	-0.	2.50
-0.58456E 02	-0.77612E 02	0.11698E 03	-0.29420E 01	0.	-0.	2.55
-0.57976E 02	-0.45976E 02	0.87771E 02	-0.32397E 02	0.	-0.	2.60
-0.50959E 02	-0.33437E 02	0.64796E 02	-0.16934E 02	0.	-0.	2.65
-0.46018E 02	-0.15654E 02	0.46988E 02	-0.20489E 02	0.	-0.	2.70
-0.43821E 02	-0.12295E 02	0.28227E 02	-0.21220E 02	0.	-0.	2.75
-0.46140E 02	-0.71400E 01	0.14521E 02	-0.18972E 02	0.	-0.	2.80
-0.49760E 02	0.13853E 02	0.54529E 01	0.25395F 02	0.	0.	2.85
-0.54656E 02	0.23633E 02	-0.10687E 02	0.47555E 02	0.	-0.	2.90
-0.50699E 02	0.25964E 02	-0.87512E 01	0.18381E 02	0.	0.	2.95
-0.17275E 02	0.12101E 02	0.30522E 02	-0.30969E 01	0.	-0.	3.00
-0.12780E 02	0.77925E 01	0.33255E 02	-0.12940E 02	0.	-0.	3.05
-0.14124E 02	0.75495E 01	0.25541E 02	-0.14341E 02	0.	-0.	3.10
-0.14084E 02	0.78174E 01	0.18607E 02	-0.17001E 02	0.	-0.	3.15
-0.13001E 02	0.65373E 01	0.14156E 02	-0.15583E 02	0.	-0.	3.20
-0.10566E 02	0.46913E 01	0.97900E 01	-0.14847E 02	0.	-0.	3.25
-0.10184E 02	0.45190E 01	0.92537E 01	-0.13975E 02	0.	-0.	3.30
-0.10087E 02	0.31275E 01	0.89962E 01	-0.13037E 02	0.	-0.	3.35
-0.10561E 02	0.38419E 01	0.91907E 01	-0.14407E 02	0.	-0.	3.40
-0.17239E 02	0.97298E 01	0.11885E 02	-0.16962E 02	0.	-0.	3.45
-0.15966E 02	0.11746E 02	0.75824E 01	-0.16396E 02	0.	-0.	3.50
-0.13637E 02	0.13694E 02	0.40058E 01	-0.13903E 02	0.	-0.	3.55
-0.90417E 01	0.14435E 02	-0.60244F 00	-0.11334E 02	0.	-0.	3.60
-0.61107E 01	0.14214E 02	-0.32339F 01	-0.67263E 01	0.	-0.	3.65
-0.75621E 01	0.17040E 02	-0.64070E 01	-0.16090E 01	0.	-0.	3.70
0.52006E 01	0.73408E 01	-0.68379E 01	0.19677E 01	0.	0.	3.75
0.91311E 01	0.20057E 01	-0.47096E 01	0.33020E 01	0.	0.	3.80
0.10648E 02	-0.28879E 01	-0.11278E 01	0.22374E 01	0.	-0.	3.85
0.94345E 01	-0.44674E 01	0.18304E 01	-0.20993E 00	0.	-0.	3.90
0.65287E 01	-0.80264E 01	0.30311E 01	-0.28541E 01	0.	-0.	3.95
0.25517E 01	-0.77335E 01	0.24030E 01	-0.45381E 01	0.	-0.	4.00
-0.12972E 01	-0.57597E 01	0.11744E 00	-0.44539E 01	0.	-0.	4.05
-0.47634E 01	-0.30551E 01	-0.29933E 01	-0.25030F 01	0.	-0.	4.10
-0.59672E 01	-0.61029E 01	-0.55505E 01	0.84736E 00	0.	-0.	4.15
-0.61324E 01	0.24047E 01	-0.68224F 01	0.45982E 01	0.	0.	4.20
-0.51799E 01	0.40225E 01	-0.59469E 01	0.75800F 01	0.	0.	4.25
-0.37513E 01	0.	-0.30834E 01	0.	0.	0.	4.30

Table XV --- Continued

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY 20 CPS
 ALTITUDE: 24,900 FT
 MACH NUMBER: 0.85

PERCENT SEMISPAN: 40.06 SEGMENT NUMBER 101

DISCRETE SHEAR STRESS		DISCRETE AXIAL STRESS		FREQUENCY
REAL	IMAGINARY	REAL	IMAGINARY	
-0.9493E-01	0.7177E-02	0.1007E-01	-0.2383E-03	0.10
0.4400E-02	0.6132E-02	-0.1542E-03	-0.2067E-03	0.30
0.2802E-02	0.1814E-02	-0.2495E-03	-0.6265E-02	0.36
0.1113E-03	-0.4200E-01	-0.3725E-03	0.3127E-02	0.44
0.1071E-03	-0.1246E-02	-0.3617E-03	0.1139E-03	0.50
0.9350E-02	-0.4472E-02	-0.3172E-03	0.1595E-03	0.60
0.8356E-02	-0.5473E-02	-0.2919E-03	0.1958E-03	0.70
0.2732E-02	-0.6402E-02	-0.2415E-03	0.2330E-03	0.80
0.2362E-02	-0.7629E-02	-0.2465E-03	0.2764E-03	0.90
0.7169E-02	-0.1181E-03	-0.2359E-03	0.4265E-03	1.00
0.7045E-02	-0.1903E-03	-0.2150E-03	0.6620E-03	1.20
0.5490E-02	-0.2488E-03	-0.2121E-03	0.8437E-03	1.34
0.3621E-02	-0.3180E-03	-0.2494E-02	0.1046E-04	1.40
-0.1888E-02	-0.3551E-03	0.1502E-03	0.1146E-04	1.45
-0.7317E-02	-0.3814E-03	0.3341E-03	0.1192E-04	1.47
-0.1558E-03	-0.3020E-03	0.6120E-03	0.6433E-03	1.50
-0.3294E-03	-0.4794E-02	0.1295E-04	0.3740E-02	1.53
-0.4373E-03	0.9608E-02	0.1317E-04	-0.3707E-03	1.60
-0.3274E-03	0.1202E-03	0.9604E-03	-0.3489E-03	1.65
-0.1134E-03	0.1029E-03	0.2912E-03	-0.2601E-03	1.80
-0.6808E-02	0.9057E-02	0.1603E-03	-0.1936E-03	1.90
-0.4357E-02	0.4320E-02	0.9643E-02	-0.1433E-03	2.00
-0.2816E-02	0.2924E-02	0.6376E-02	-0.9938E-02	2.10
-0.1671E-02	0.2922E-02	0.5013E-02	-0.2008E-02	2.20
-0.1019E-02	0.8532E-02	0.7129E-02	-0.2432E-02	2.30
-0.3131E-01	0.8812E-02	0.6330E-02	-0.5226E-02	2.35
0.7504E-01	0.8846E-02	0.6622E-02	-0.4972E-02	2.40
0.1457E-02	0.8790E-02	0.7732E-02	-0.4919E-02	2.45
0.1269E-02	0.8412E-02	0.8401E-02	-0.6079E-02	2.46
0.2452E-02	0.8029E-02	0.1004E-03	-0.8228E-02	2.47
0.2573E-02	0.8441E-02	0.9543E-02	-0.8115E-02	2.50
0.2667E-02	0.9207E-02	0.7261E-02	-0.6370E-02	2.54
0.3491E-02	0.1029E-03	0.6801E-02	-0.3937E-02	2.58
0.6506E-02	0.1010E-03	0.9327E-02	-0.3888E-02	2.65
0.1046E-03	-0.1276E-02	0.1358E-03	-0.1248E-03	2.70
0.1735E-03	-0.2949E-02	0.1786E-03	-0.1837E-03	2.80
0.6732E-01	0.6622E-01	-0.1928E-02	-0.1576E-03	3.00
0.4216E-01	0.4000E-02	-0.2216E-02	-0.1552E-03	3.10
0.1490E-02	0.6353E-02	-0.1358E-02	-0.1644E-03	3.20
0.4247E-02	0.2777E-02	-0.1805E-02	-0.1716E-03	3.26
0.6469E-02	0.9101E-02	-0.2949E-02	-0.1706E-03	3.29
0.1359E-03	0.2889E-02	-0.1432E-03	-0.9040E-02	3.35
0.2135E-03	-0.1815E-03	-0.2183E-03	-0.2402E-02	3.40
0.1452E-03	-0.2104E-03	-0.3321E-02	-0.3072E-02	3.52
0.1000E-03	-0.2252E-03	-0.1062E-02	-0.7487E-02	3.56
0.3562E-02	-0.1401E-03	-0.3718E-02	-0.3694E-02	3.60
-0.6533E-02	-0.6921E-02	-0.4994E-02	-0.2204E-01	3.70
-0.6133E-02	-0.4394E-02	-0.7499E-02	0.1059E-02	3.85
-0.5211E-02	-0.2809E-02	-0.5536E-02	0.1446E-02	4.00
-0.4539E-02	-0.1497E-02	-0.4014E-02	0.1767E-02	4.20
-0.4065E-02	-0.8486E-01	-0.2411E-02	0.1813E-02	4.30
-0.4005E-02	-0.4233E-01	-0.1249E-02	0.1621E-02	4.70
-0.4085E-02	0.7388E-01	-0.4659E-01	-0.2169E-01	4.80
-0.4197E-02	0.1251E-02	0.9131E-01	-0.1260E-02	4.86
-0.3952E-02	0.1412E-02	0.7025E-01	-0.1570E-02	5.00
-0.2205E-02	0.8232E-01	-0.2607E-02	0.2646E-01	5.15
-0.1925E-02	0.7303E-01	-0.2841E-02	0.1105E-02	5.30
-0.1495E-02	0.8194E-01	-0.2182E-02	0.1396E-02	5.50
-0.1795E-02	0.8952E-01	-0.1589E-02	0.1452E-02	5.70
-0.1687E-02	0.9162E-01	-0.1213E-02	0.1331E-02	5.85
-0.1528E-02	0.8993E-01	-0.8364E-01	0.1270E-02	6.00
-0.1504E-02	0.8235E-01	-0.2906E-02	0.1194E-02	6.05
-0.1486E-02	0.8417E-01	-0.2686E-01	0.1114E-02	6.06
-0.1504E-02	0.9607E-01	-0.2852E-02	0.1231E-02	6.08
-0.1648E-02	0.1223E-02	-0.1015E-02	0.1449E-02	6.20
-0.1457E-02	0.1344E-02	-0.6478E-01	0.1400E-02	6.45
-0.1247E-02	0.1476E-02	-0.3427E-01	0.1188E-02	6.60
-0.8553E-01	0.1511E-02	0.5147E-01	0.9684E-01	7.00
-0.5005E-01	0.1430E-02	0.2243E-01	0.5749E-01	7.40
0.5779E-01	0.1168E-02	0.5474E-01	0.1374E-01	8.00
0.6056E-01	0.6695E-01	0.5847E-01	-0.1641E-01	9.00
0.9532E-01	0.1364E-01	0.5525E-01	-0.2821E-01	10.00
0.1064E-02	-0.3303E-01	0.9635E-01	-0.1911E-01	11.00
0.9110E-01	-0.6607E-01	-0.1563E-01	0.1793E-01	12.00
0.6114E-01	-0.7838E-01	-0.2587E-01	0.2458E-01	13.00
0.7212E-01	-0.7386E-01	-0.2053E-01	0.3877E-01	14.00
-0.1405E-01	-0.5443E-01	-0.1003E-01	0.3805E-01	15.00
-0.4091E-01	-0.2883E-01	0.2557E-01	0.2158E-01	16.00
-0.5607E-01	-0.1740E-01	0.4242E-01	-0.7411E-01	17.00
-0.5702E-01	0.2082E-01	0.5829E-01	-0.3928E-01	18.00
-0.4829E-01	0.3562E-01	0.5081E-01	-0.6476E-01	19.00
-0.3285E-01	0.	0.2636E-01	0.	20.00

Table XV --- Continued

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 20 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

BODY BALANCE STATION: 540 SEGMENT NUMBER 17

INCREMENTAL SHEAR STRESS						
REAL	IMAGINARY					
-0.41556E-01	-0.11891E 01	0.	-0.	0.	-0.	0.00
-0.12179E 01	-0.77808E 00	0.	-0.	0.	-0.	0.00
-0.18598E 01	0.91125E-01	0.	-0.	0.	-0.	0.00
-0.19904E 01	0.50408E 00	-0.	-0.	-0.	-0.	0.00
-0.17376E 01	0.74625E 00	-0.	-0.	-0.	-0.	0.00
-0.13531E 01	0.80553E 00	-0.	-0.	-0.	-0.	0.00
-0.11179E 01	0.82421E 00	-0.	-0.	-0.	-0.	0.00
-0.98007E 00	0.84129E 00	-0.	-0.	-0.	-0.	0.00
-0.90381E 00	0.87597E 00	-0.	-0.	-0.	-0.	0.00
-0.97077E 00	0.10753E 01	-0.	-0.	-0.	-0.	0.00
-0.90624E 00	0.15150E 01	-0.	-0.	-0.	-0.	0.00
-0.56810E 00	0.19134E 01	0.	-0.	0.	-0.	0.00
-0.92364E 00	0.24331E 01	0.	-0.	0.	-0.	0.00
-0.69876E 00	0.27529E 01	-0.	-0.	-0.	-0.	0.00
-0.42273E-00	0.30482E 01	-0.	-0.	-0.	-0.	0.00
0.49574E-01	0.29039E 01	-0.	-0.	-0.	-0.	0.00
0.15715E 01	0.13955E 01	-0.	-0.	-0.	-0.	0.00
0.23187E 01	0.31194E-00	-0.	-0.	-0.	-0.	0.00
0.18053E 01	-0.14333E-00	-0.	-0.	-0.	-0.	0.00
0.45002E-00	-0.65050E-01	-0.	-0.	-0.	-0.	0.00
0.75392E-01	0.30583E-01	-0.	-0.	-0.	-0.	0.00
-0.17078E-00	0.13103E-00	-0.	-0.	-0.	-0.	0.00
-0.36177E-00	0.25075E-00	-0.	-0.	-0.	-0.	0.00
-0.53919E 00	0.45146E-00	0.	-0.	0.	-0.	0.00
-0.70218E 00	0.56544E 00	0.	-0.	0.	-0.	0.00
-0.73011E 00	0.70344E 00	0.	-0.	0.	-0.	0.00
-0.73506E 00	0.79091E 00	0.	-0.	0.	-0.	0.00
-0.66940E 00	0.81309E 00	0.	-0.	0.	-0.	0.00
-0.61489E 00	0.73339E 00	0.	-0.	0.	-0.	0.00
-0.42446E-00	0.42470E-00	0.	-0.	0.	-0.	0.00
-0.44417E-00	0.20201E-00	0.	-0.	0.	-0.	0.00
-0.78709E 00	0.23893E-00	0.	-0.	0.	-0.	0.00
-0.11547E 01	0.45288E-00	0.	-0.	0.	-0.	0.00
-0.17409E 01	0.77002E 00	0.	-0.	0.	-0.	0.00
-0.23210E 01	0.28963E 01	0.	-0.	0.	-0.	0.00
-0.31240E 01	0.46036E 01	0.	-0.	0.	-0.	0.00
-0.87678E 00	0.57242E 01	0.	-0.	0.	-0.	0.00
-0.43960E-00	0.79344E 01	0.	-0.	0.	-0.	0.00
0.77891E 00	0.10005E 02	-0.	-0.	-0.	-0.	0.00
0.27924E 01	0.11310E 02	-0.	-0.	-0.	-0.	0.00
0.49545E 01	0.12024E 02	-0.	-0.	-0.	-0.	0.00
0.12119E 02	0.39513E 01	-0.	-0.	-0.	-0.	0.00
0.20749E 02	-0.91543E 01	-0.	-0.	-0.	-0.	0.00
0.21839E 01	-0.42554E 01	-0.	-0.	-0.	-0.	0.00
-0.54691E 00	-0.18374E-00	0.	-0.	0.	-0.	0.00
0.95789E 00	-0.18467E 01	-0.	-0.	-0.	-0.	0.00
0.52655E 01	-0.36728E 01	-0.	-0.	-0.	-0.	0.00
0.31931E 01	-0.34853E 01	-0.	-0.	-0.	-0.	0.00
0.17466E 01	-0.25987E 01	-0.	-0.	-0.	-0.	0.00
0.77809E 00	-0.24141E 01	-0.	-0.	-0.	-0.	0.00
0.72859E-01	-0.21506E 01	-0.	-0.	-0.	-0.	0.00
-0.13809E-00	-0.20910E 01	-0.	-0.	-0.	-0.	0.00
-0.16757E-00	-0.23517E 01	-0.	-0.	-0.	-0.	0.00
-0.19904E-00	-0.25313E 01	-0.	-0.	-0.	-0.	0.00
-0.34072E-00	-0.23803E 01	-0.	-0.	-0.	-0.	0.00
-0.13132E 01	-0.18525E 01	0.	-0.	0.	-0.	0.00
-0.15914E 01	-0.15331E 01	0.	-0.	0.	-0.	0.00
-0.18658E 01	-0.12681E 01	0.	-0.	0.	-0.	0.00
-0.24453E 01	-0.87254E 00	0.	-0.	0.	-0.	0.00
-0.33136E 01	0.10737E 01	0.	-0.	0.	-0.	0.00
-0.51447E 01	0.19715E 01	0.	-0.	0.	-0.	0.00
-0.54273E 01	0.31694E 01	0.	-0.	0.	-0.	0.00
-0.54659E 01	0.45877E 01	0.	-0.	0.	-0.	0.00
-0.50013E 01	0.49601E 01	0.	-0.	0.	-0.	0.00
0.14277E 01	0.91832E 00	-0.	-0.	-0.	-0.	0.00
0.15643E 01	0.14376E-00	-0.	-0.	-0.	-0.	0.00
0.84113E 00	-0.17447E-00	-0.	-0.	-0.	-0.	0.00
0.25746E-00	-0.12172E-00	-0.	-0.	-0.	-0.	0.00
0.61850E-01	-0.54738E-01	-0.	-0.	-0.	-0.	0.00
-0.21216E-01	-0.37764E-01	-0.	-0.	-0.	-0.	0.00
0.12324E-03	-0.62769E-01	-0.	-0.	-0.	-0.	0.00
0.17713E-01	-0.96605E-01	-0.	-0.	-0.	-0.	0.00
0.29369E-02	-0.10807E-00	-0.	-0.	-0.	-0.	0.00
-0.39261E-01	-0.85250E-01	-0.	-0.	-0.	-0.	0.00
-0.74680E-01	-0.48464E-01	-0.	-0.	-0.	-0.	0.00
-0.88869E-01	-0.17083E-01	-0.	-0.	-0.	-0.	0.00
-0.75929E-01	-0.72081E-02	-0.	-0.	-0.	-0.	0.00
-0.50305E-01	-0.19938E-01	-0.	-0.	-0.	-0.	0.00
-0.54450E-03	-0.43249E-03	-0.	-0.	-0.	-0.	0.00
-0.38823E-01	-0.54482E-01	-0.	-0.	-0.	-0.	0.00
-0.47129E-01	-0.41010E-01	-0.	-0.	-0.	-0.	0.00
-0.10530E-00	0.	-0.	-0.	-0.	-0.	0.00

Table XV --- Concluded

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 20 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

BODY BALANCE STATION: 820 SEGMENT NUMBER: 1

		INCREMENTAL AXIAL STRESS							
		REAL		IMAGINARY					
									FREQUENCY CPS
0.	0.	0.14028E 01	0.11502E 03	0.	0.	0.	0.	0.	0.00
0.	0.	0.01791E 02	0.93964E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.15584E 03	0.15400E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.18558E 03	-0.27779E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.17821E 03	-0.61520E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.14671E 03	-0.77793E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.12895E 03	-0.90099E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.11819E 03	-0.10295E 03	0.	0.	0.	0.	0.	0.00
0.	0.	0.11194E 03	-0.13949E 03	0.	0.	0.	0.	0.	0.00
0.	0.	0.10821E 03	-0.17704E 03	0.	0.	0.	0.	0.	0.00
0.	0.	0.10547E 03	-0.27277E 03	0.	0.	0.	0.	0.	0.00
0.	0.	0.08704E 02	-0.34835E 03	0.	0.	0.	0.	0.	0.00
0.	0.	0.53972E 02	-0.45526E 03	0.	0.	0.	0.	0.	0.00
0.	0.	-0.21784E 02	-0.45013E 03	0.	0.	0.	0.	0.	0.00
0.	0.	-0.94391E 02	-0.50844E 03	0.	0.	0.	0.	0.	0.00
0.	0.	-0.20281E 03	-0.39070E 03	0.	0.	0.	0.	0.	0.00
0.	0.	-0.48505E 03	-0.60810E 02	0.	0.	0.	0.	0.	0.00
0.	0.	-0.53849E 03	0.11324E 03	0.	0.	0.	0.	0.	0.00
0.	0.	-0.37841E 03	0.11784E 03	0.	0.	0.	0.	0.	0.00
0.	0.	-0.10442E 03	0.02115E 02	0.	0.	0.	0.	0.	0.00
0.	0.	-0.46515E 02	0.52414E 02	0.	0.	0.	0.	0.	0.00
0.	0.	-0.15721E 02	0.26898E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.36612E 01	0.04538E 00	0.	0.	0.	0.	0.	0.00
0.	0.	0.11133E 02	-0.25298E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.41083E 01	-0.33168E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.33616E 01	-0.51983E 02	0.	0.	0.	0.	0.	0.00
0.	0.	-0.54249E 01	-0.61054E 02	0.	0.	0.	0.	0.	0.00
0.	0.	-0.21615E 02	-0.62007E 02	0.	0.	0.	0.	0.	0.00
0.	0.	-0.31440E 02	-0.46208E 02	0.	0.	0.	0.	0.	0.00
0.	0.	-0.58657E 02	-0.98128E 01	0.	0.	0.	0.	0.	0.00
0.	0.	-0.57863E 02	0.25187E 01	0.	0.	0.	0.	0.	0.00
0.	0.	-0.22123E 02	-0.13984E 02	0.	0.	0.	0.	0.	0.00
0.	0.	-0.28605E 01	-0.47191E 02	0.	0.	0.	0.	0.	0.00
0.	0.	-0.47438E 01	-0.63847E 02	0.	0.	0.	0.	0.	0.00
0.	0.	-0.27224E 02	-0.47929E 01	0.	0.	0.	0.	0.	0.00
0.	0.	-0.80642E 02	-0.46099E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.59613E 02	-0.17611E 03	0.	0.	0.	0.	0.	0.00
0.	0.	0.60151E 02	-0.23512E 03	0.	0.	0.	0.	0.	0.00
0.	0.	0.19306E 02	-0.32561E 03	0.	0.	0.	0.	0.	0.00
0.	0.	-0.56971E 02	-0.38009E 03	0.	0.	0.	0.	0.	0.00
0.	0.	-0.14021E 03	-0.43035E 03	0.	0.	0.	0.	0.	0.00
0.	0.	-0.41580E 03	-0.95408E 02	0.	0.	0.	0.	0.	0.00
0.	0.	-0.73783E 03	0.34171E 03	0.	0.	0.	0.	0.	0.00
0.	0.	0.18019E 02	0.13610E 03	0.	0.	0.	0.	0.	0.00
0.	0.	0.10462E 03	-0.63286E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.13787E 01	0.58239E 02	0.	0.	0.	0.	0.	0.00
0.	0.	-0.22218E 03	0.15435E 03	0.	0.	0.	0.	0.	0.00
0.	0.	-0.17236E 03	0.13279E 03	0.	0.	0.	0.	0.	0.00
0.	0.	-0.54874E 02	0.13011E 03	0.	0.	0.	0.	0.	0.00
0.	0.	-0.10158E 02	0.10090E 03	0.	0.	0.	0.	0.	0.00
0.	0.	0.24833E 02	0.04378E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.42472E 02	0.74936E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.57274E 02	0.44714E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.67968E 02	0.31246E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.65645E 02	0.21698E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.31126E 02	0.34112E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.30421E 02	0.34785E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.40272E 02	0.29496E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.51146E 02	0.21124E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.68493E 02	-0.12977E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.98498E 02	-0.27972E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.10297E 03	-0.47786E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.10341E 03	-0.71080E 02	0.	0.	0.	0.	0.	0.00
0.	0.	0.95663E 02	-0.77724E 02	0.	0.	0.	0.	0.	0.00
0.	0.	-0.86355E 01	-0.14992E 02	0.	0.	0.	0.	0.	0.00
0.	0.	-0.10725E 02	-0.51051E 01	0.	0.	0.	0.	0.	0.00
0.	0.	0.12145E 01	-0.47990E 01	0.	0.	0.	0.	0.	0.00
0.	0.	0.43164E 01	-0.72223E 01	0.	0.	0.	0.	0.	0.00
0.	0.	0.58231E 01	-0.96245E 01	0.	0.	0.	0.	0.	0.00
0.	0.	0.45788E 00	-0.85378E 01	0.	0.	0.	0.	0.	0.00
0.	0.	-0.50716E 01	-0.43969E 01	0.	0.	0.	0.	0.	0.00
0.	0.	-0.89844E 01	-0.12324E 00	0.	0.	0.	0.	0.	0.00
0.	0.	-0.94285E 01	0.26358E 01	0.	0.	0.	0.	0.	0.00
0.	0.	-0.70864E 01	0.36723E 01	0.	0.	0.	0.	0.	0.00
0.	0.	-0.57684E 01	0.56388E 01	0.	0.	0.	0.	0.	0.00
0.	0.	-0.41274E 01	0.27960E 01	0.	0.	0.	0.	0.	0.00
0.	0.	-0.32340E 01	0.21957E 01	0.	0.	0.	0.	0.	0.00
0.	0.	-0.28365E 01	0.17949E 01	0.	0.	0.	0.	0.	0.00
0.	0.	-0.25374E 01	0.13026E 01	0.	0.	0.	0.	0.	0.00
0.	0.	-0.71031E 01	0.35543E 00	0.	0.	0.	0.	0.	0.00
0.	0.	-0.17728E 01	-0.10769E 01	0.	0.	0.	0.	0.	0.00
0.	0.	-0.18833E 01	0.	0.	0.	0.	0.	0.	0.00

Table XVI Stress Frequency Response Functions (Analysis Condition 2)

(PSI/PPS SINUSOIDAL GUST)

GROSS WEIGHT: 268,000 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMISPAN: 27 SEGMENT NUMBER 10

INCIDENTAL SHEAR STRESS		INCIDENTAL AXIAL STRESS				FREQUENCY CPS
REAL	IMAGINARY	REAL	IMAGINARY			
1.304977-00	0.33327E 02	0.61031E 00	0.29829E 03	0.	-0.	0.25
0.33941E 02	0.21879E 02	0.28946E 03	0.19022E 03	-0.	-0.	0.50
0.49582E 02	0.73387E 01	0.42891E 03	0.25025E 02	-0.	-0.	0.75
0.33714E 02	-0.78171E 01	0.46704E 03	-0.65018E 02	-0.	-0.	1.00
0.50625E 02	-0.16911E 02	0.43899E 03	-0.14570E 03	-0.	-0.	1.25
0.45020E 02	-0.22383E 02	0.38534E 03	-0.19233E 03	-0.	-0.	1.50
0.41137E 02	-0.26967E 02	0.34486E 03	-0.22029E 03	-0.	-0.	1.75
0.38690E 02	-0.31759E 02	0.31485E 03	-0.26202E 03	-0.	-0.	2.00
0.37171E 02	-0.37341E 02	0.29137E 03	-0.29849E 03	-0.	-0.	2.25
0.36289E 02	-0.43894E 02	0.27132E 03	-0.33804E 03	-0.	-0.	2.50
0.35553E 02	-0.50831E 02	0.25433E 03	-0.37934E 03	-0.	-0.	2.75
0.34211E 02	-0.58353E 02	0.19848E 03	-0.55562E 03	0.	-0.	3.00
0.32314E 02	-0.10306E 03	0.17419E 03	-0.62829E 03	0.	-0.	3.25
0.29138E 02	-0.11197E 03	0.14477E 03	-0.65843E 03	0.	-0.	3.50
0.26602E 02	-0.12219E 03	0.12495E 03	-0.70130E 03	0.	-0.	3.75
0.23094E 02	-0.14740E 03	0.10012E 03	-0.80339E 03	0.	-0.	4.00
0.11384E 02	-0.18019E 03	0.27434E 02	-0.92044E 03	0.	-0.	4.25
-0.11944E 02	-0.21854E 03	-0.99413E 02	-0.10309E 04	-0.	-0.	4.50
-0.59543E 02	-0.33523E 02	-0.33015E 03	-0.11039E 03	-0.	-0.	4.75
-0.33927E 03	0.13073E 03	-0.13719E 04	0.45037E 03	-0.	-0.	5.00
-0.20047E 03	0.13384E 03	-0.69391E 03	0.37378E 03	-0.	-0.	5.25
-0.10278E 03	0.11989E 03	-0.30430E 03	0.76271E 05	-0.	-0.	5.50
-0.57829E 02	0.10923E 03	-0.15237E 03	0.17426E 03	-0.	-0.	5.75
-0.32122E 02	0.99165E 02	-0.84124E 02	0.18437E 03	-0.	-0.	6.00
-0.10603E 02	0.90912E 02	-0.64087E 02	0.81173E 02	-0.	-0.	6.25
-0.68524E 01	0.88016E 02	-0.38829E 02	0.58042E 02	0.	-0.	6.50
-0.45887E 01	0.86493E 02	-0.61991E 02	0.33374E 02	0.	-0.	6.75
-0.34858E 01	0.83913E 02	-0.74849E 02	0.28717E 02	0.	-0.	7.00
-0.33533E 01	0.85438E 02	-0.83481E 02	0.29683E 02	0.	-0.	7.25
-0.42973E 01	0.88673E 02	-0.11255E 04	0.35433E 02	0.	-0.	7.50
-0.56243E 01	0.93866E 02	-0.13199E 03	0.97708E 02	0.	-0.	7.75
-0.16194E 01	0.99622E 02	-0.10600E 03	0.95498E 02	0.	-0.	8.00
0.59393E 01	0.10232E 03	-0.10676E 02	0.47747E 02	0.	-0.	8.25
0.17910E 02	0.10426E 03	-0.43791E 02	0.48897E 02	0.	-0.	8.50
0.26114E 02	0.10972E 03	-0.38264E 02	0.20273E 02	0.	-0.	8.75
0.43679E 02	0.12833E 03	-0.40236E 02	-0.18527E 02	0.	-0.	9.00
0.10282E 03	0.13734E 03	-0.71153E 02	-0.29113E 02	0.	-0.	9.25
0.16432E 03	0.11642E 03	-0.10347E 03	-0.19437E 02	0.	-0.	9.50
0.28827E 03	0.22209E 02	-0.16171E 03	0.27554E 02	0.	-0.	9.75
0.40981E 03	-0.10634E 03	-0.21267E 03	0.88333E 02	0.	-0.	10.00
0.43925E 03	-0.36059E 03	-0.22818E 03	0.19966E 03	0.	-0.	10.25
0.30453E 03	-0.30334E 03	-0.13726E 03	0.15690E 03	0.	-0.	10.50
0.99036E 02	-0.31219E 03	-0.19872E 02	0.27808E 02	0.	-0.	10.75
0.37591E 02	-0.29040E 03	-0.29131E 02	0.15402E 02	0.	-0.	11.00
-0.43659E 02	-0.24686E 03	-0.45690E 02	0.70146E 01	-0.	-0.	11.25
-0.89493E 02	-0.15219E 03	-0.61206E 02	-0.18427E 01	-0.	-0.	11.50
-0.17734E 03	-0.69139E 02	-0.10414E 03	0.22626E 02	-0.	-0.	11.75
-0.13189E 03	0.70290E 00	-0.18341E 03	0.14940E 03	-0.	-0.	12.00
-0.12088E 03	0.53387E 02	-0.27380E 03	0.44482E 03	-0.	-0.	12.25
-0.31257E 02	-0.82688E 01	-0.49196E 02	0.15792E 03	-0.	-0.	12.50
-0.52292E 01	-0.17621E 02	0.70834E 03	0.63275E 02	-0.	-0.	12.75
-0.15472E 02	-0.11747E 02	0.17910E 03	0.36703E 02	-0.	-0.	13.00
-0.18705E 02	-0.90481E 01	0.16398E 03	0.72192E 01	-0.	-0.	13.25
-0.22215E 02	-0.82109E 01	0.14342E 03	0.11231E 01	-0.	-0.	13.50
-0.27900E 02	-0.50006E 01	0.13877E 03	-0.17231E 02	-0.	-0.	13.75
-0.24849E 02	-0.11934E 01	0.12434E 03	-0.3362E 02	-0.	-0.	14.00
-0.76447E 02	0.31097E 01	0.11177E 03	-0.34695E 02	-0.	-0.	14.25
-0.28350E 02	0.16764E 02	0.97817E 02	-0.84253E 02	-0.	-0.	14.50
-0.79672E 02	0.34278E 02	0.81437E 02	-0.11731E 03	-0.	-0.	14.75
-0.22481E 02	0.31057E 02	0.50620E 02	-0.99944E 02	-0.	-0.	15.00
0.14308E 02	0.24143E 02	-0.23361E 02	-0.88007E 02	0.	-0.	15.25
0.17610E 02	0.17432E 02	-0.26633E 02	-0.78143E 02	0.	-0.	15.50
0.18055E 02	0.12222E 02	-0.26155E 02	-0.71159E 02	0.	-0.	15.75
0.16903E 02	0.84016E 00	-0.21663E 02	-0.66046E 02	0.	-0.	16.00
0.69738E 01	-0.11186E 00	-0.14597E 02	-0.75876E 02	0.	-0.	16.25
-0.31961E 01	0.33698E 01	-0.47786E 02	-0.22148E 01	0.	-0.	16.50
-0.62814E 01	0.30833E 01	-0.10377E 03	0.32176E 02	0.	-0.	16.75
-0.54870E 01	0.63166E 01	-0.32347E 01	0.11866E 02	-0.	-0.	17.00
-0.48608E 01	0.77709E 01	0.88861E 01	-0.18689E 01	-0.	-0.	17.25
-0.70678E 01	0.74488E 01	0.82708E 01	-0.39169E 01	-0.	-0.	17.50
0.98984E 00	0.36939E 01	0.48337E 01	-0.37888E 01	-0.	-0.	17.75
0.38771E 01	0.	0.16609E 01	0.	0.	0.	18.00

Table X-1 --- Continued

(PSI/PPS SINUSOIDAL GUST)

GROSS WEIGHT: 260,000 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.75

PERCENT SEMISPAN: 27 SEGMENT NUMBER 14

INCREMENTAL AXIAL STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY CPS
REAL	IMAGINARY	REAL	IMAGINARY			
0.59676E 00	0.30581E 03	0.35482E 00	0.27009E 03	0.	-0.	0.10
0.10490E 03	0.69560E 02	0.26247E 03	0.17988E 03	-0.	-0.	0.15
0.15407E 03	0.83650E 01	0.38922E 03	0.23436E 02	-0.	-0.	0.20
0.16683E 03	-0.23503E 02	0.62302E 03	-0.59000E 02	-0.	0.	0.25
0.15663E 03	-0.51574E 02	0.39037E 03	-0.13220E 03	-0.	0.	0.30
0.13770E 03	-0.67734E 02	0.34969E 03	-0.17454E 03	-0.	0.	0.35
0.12407E 03	-0.80421E 02	0.31295E 03	-0.20717E 03	-0.	0.	0.40
0.11430E 03	-0.92686E 02	0.28572E 03	-0.23778E 03	-0.	0.	0.45
0.10737E 03	-0.10643E 03	0.26442E 03	-0.27064E 03	-0.	0.	0.50
0.10182E 03	-0.14378E 03	0.24421E 03	-0.35486E 03	-0.	0.	0.55
0.93019E 02	-0.1950E 03	0.22265E 03	-0.44816E 03	0.	-0.	0.60
0.84261E 02	-0.21501E 03	0.18005E 03	-0.56471E 03	-0.	-0.	0.65
0.77994E 02	-0.24434E 03	0.15807E 03	-0.56290E 03	0.	-0.	0.70
0.68136E 02	-0.26193E 03	0.13130E 03	-0.59733E 03	0.	-0.	0.75
0.61470E 02	-0.28189E 03	0.11139E 03	-0.63641E 03	0.	-0.	0.80
0.52734E 02	-0.33046E 03	0.90856E 02	-0.72905E 03	0.	-0.	0.85
0.25431E 02	-0.39220E 03	0.24895E 02	-0.84234E 03	0.	-0.	0.90
-0.74958E 02	-0.46140E 03	-0.89944E 02	-0.96095E 03	-0.	-0.	0.95
-0.12306E 03	-0.73232E 02	-0.29960E 03	-0.10017E 03	-0.	-0.	1.00
-0.64338E 03	0.22147E 03	-0.12450E 04	0.40870E 03	-0.	0.	1.05
-0.35701E 04	0.210.0E 03	-0.42971E 03	0.33919E 03	-0.	0.	1.10
-0.17203E 03	0.17296E 03	-0.27796E 03	0.23640E 03	-0.	0.	1.15
-0.92518E 07	0.14231E 03	-0.13844E 03	0.15814E 03	-0.	0.	1.20
-0.50845E 02	0.11571E 03	-0.74342E 02	0.94718E 02	-0.	0.	1.25
-0.26298E 02	0.10342E 03	-0.38158E 02	0.73663E 02	-0.	0.	1.30
-0.21444E 02	0.92711E 02	-0.52386E 02	0.45412E 02	0.	0.	1.35
-0.19883E 02	0.86805E 02	-0.54256E 02	0.30468E 02	0.	0.	1.40
-0.22733E 02	0.84980E 02	-0.68015E 02	0.26066E 02	0.	0.	1.45
-0.25292E 02	0.85527E 02	-0.75757E 02	0.20939E 02	0.	0.	1.50
-0.35505E 02	0.90948E 02	-0.10214E 03	0.33936E 02	0.	0.	1.55
-0.43283E 02	0.11985E 03	-0.11978E 03	0.88688E 02	0.	0.	1.60
-0.31138E 02	0.12444E 03	-0.96194E 02	0.86844E 02	0.	0.	1.65
-0.11847E 02	0.12012E 03	-0.44137E 02	0.61479E 02	0.	0.	1.70
0.99998E 01	0.11727E 03	-0.39741E 02	0.44373E 02	0.	0.	1.75
0.21178E 02	0.11537E 03	-0.34723E 02	0.18297E 02	0.	0.	1.80
0.41073E 02	0.12324E 03	-0.36513E 02	0.16813E 02	0.	0.	1.85
0.01844E 03	0.12693E 03	-0.64526E 02	0.26419E 02	0.	0.	1.90
0.16531E 03	0.96851E 02	-0.93897E 02	-0.17630E 02	0.	0.	1.95
0.29467E 03	-0.12729E 02	-0.14474E 03	0.25005E 02	0.	0.	2.00
0.42226E 03	-0.15837E 03	-0.19299E 03	0.88162E 02	-0.	-0.	2.05
0.47180E 03	-0.44896E 03	-0.20707E 03	0.18119E 03	0.	-0.	2.10
0.28410E 03	-0.38400E 03	-0.12436E 03	0.14238E 03	0.	-0.	2.15
0.32684E 02	-0.31484E 03	-0.18034E 02	0.25233E 02	0.	-0.	2.20
-0.94752E 02	-0.28491E 03	-0.26436E 02	0.13977E 02	0.	-0.	2.25
-0.11754E 03	-0.24332E 03	-0.41443E 02	0.43456E 01	-0.	-0.	2.30
-0.15686E 03	-0.15054E 03	-0.55416E 02	-0.16722E 01	-0.	-0.	2.35
-0.19550E 03	-0.44974E 02	-0.94508E 02	0.20533E 02	-0.	-0.	2.40
-0.22909E 03	0.42721E 02	-0.14644E 03	0.13558E 03	-0.	-0.	2.45
-0.25899E 03	0.23035E 03	-0.24847E 03	0.40366E 03	-0.	-0.	2.50
-0.57753E 02	0.57654E 02	-0.44644E 02	0.16331E 03	-0.	-0.	2.55
0.71750E 02	0.14837E 02	0.18924E 03	0.57421E 02	-0.	-0.	2.60
0.55342E 02	0.57963E 01	0.14253E 03	0.33382E 02	-0.	-0.	2.65
0.47773E 02	-0.44064E 01	0.14881E 03	0.63313E 01	-0.	-0.	2.70
0.18644E 02	-0.44014E 01	0.13015E 03	0.10210E 01	-0.	-0.	2.75
0.34784E 02	-0.12347E 02	0.12593E 03	-0.13655E 02	-0.	-0.	2.80
0.31333E 02	-0.17848E 02	0.11284E 03	-0.30317E 02	-0.	0.	2.85
0.27016E 02	-0.25741E 02	0.10143E 03	-0.49633E 02	-0.	0.	2.90
0.27487E 02	-0.38136E 02	0.88767E 02	-0.76453E 02	-0.	0.	2.95
0.16388E 02	-0.51974E 02	0.73902E 02	-0.10663E 03	-0.	0.	3.00
0.27470E 01	-0.42872E 02	0.45934E 02	-0.90697E 02	-0.	0.	3.05
-0.27111E 02	-0.38142E 02	-0.21200E 02	-0.79864E 02	0.	0.	3.10
-0.27831E 02	-0.34552E 02	-0.24149E 02	-0.70913E 02	0.	0.	3.15
-0.27106E 02	-0.32350E 02	-0.23735E 02	-0.64373E 02	0.	0.	3.20
-0.25730E 02	-0.34407E 02	-0.21474E 02	-0.39933E 02	0.	0.	3.25
-0.27951E 02	-0.45949E 02	-0.13244E 02	-0.72484E 02	0.	0.	3.30
-0.49714E 02	0.12047E 02	-0.43364E 02	-0.20098E 01	0.	-0.	3.35
-0.92591E 02	0.41122E 02	-0.94171E 02	-0.29199E 02	0.	-0.	3.40
-0.13450E 02	0.25981E 02	-0.29534E 01	0.10768E 02	-0.	-0.	3.45
0.61439E 00	0.13923E 02	0.87899E 01	-0.97000E 00	-0.	0.	3.50
0.44715E 01	0.74401E 01	0.75055E 01	-0.35345E 01	-0.	0.	3.55
0.81872E 01	0.27042E 01	0.43865E 01	-0.34382E 01	-0.	0.	3.60
0.79027E 01	0.	0.17872E 01	0.	0.	0.	3.65

Table XVI - - - Continued

(PSI/PS SINUSOIDAL GUST)

GROSS WEIGHT: 268,000 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.8

PERCENT SEMI-PAN: 40.06 SEGMENT NUMBER 8

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY CPS
REAL	IMAGINARY	REAL	IMAGINARY			
0.25514E-00	0.66629E 02	-0.24416E-01	0.27159E 03	0.	0.	0.30
0.67893E 02	0.45532E 02	0.26127E 03	0.18101E 03	0.	0.	0.30
0.99993E 02	0.58171E 01	0.38903E 03	0.23330E 02	0.	0.	0.30
0.10877E 03	-0.15047E 02	0.42488E 03	-0.68332E 02	0.	-0.	0.30
0.10256E 03	-0.35733E 02	0.39971E 03	-0.13492E 03	0.	-0.	0.30
0.90923E 02	-0.44460E 02	0.35073E 03	-0.17844E 03	0.	-0.	0.30
0.92594E 02	-0.53954E 02	0.31326E 03	-0.21214E 03	0.	-0.	0.30
0.76193E 02	-0.63673E 02	0.28500E 03	-0.24344E 03	0.	-0.	0.30
0.72918E 02	-0.73601E 02	0.26243E 03	-0.27747E 03	0.	-0.	0.30
0.69965E 02	-0.10300E 03	0.24258E 03	-0.36223E 03	0.	-0.	1.00
0.65407E 02	-0.13863E 03	0.20463E 03	-0.45503E 03	0.	-0.	1.00
0.59459E 02	-0.16104E 03	0.16740E 03	-0.31033E 03	0.	-0.	1.00
0.54661E 02	-0.18510E 03	0.14283E 03	-0.36791E 03	0.	-0.	1.00
0.47754E 02	-0.19955E 03	0.11356E 03	-0.60174E 03	0.	-0.	1.00
0.42506E 02	-0.21598E 03	0.94103E 02	-0.63960E 03	0.	-0.	1.00
0.35541E 02	-0.25600E 03	0.69973E 02	-0.72923E 03	0.	-0.	1.00
0.13677E 02	-0.30693E 03	0.39709E-00	-0.83756E 03	0.	-0.	1.00
-0.27767E 02	-0.36420E 03	-0.31847E 03	-0.94701E 03	-0.	-0.	1.00
-0.10854E 03	-0.41617E 02	-0.33154E 03	-0.37372E 02	-0.	-0.	1.00
-0.53774E 03	0.20757E 03	-0.12366E 04	0.42220E 03	-0.	-0.	1.00
-0.79973E 03	0.19305E 03	-0.60791E 03	0.32870E 03	-0.	-0.	1.00
-0.14539E 03	0.16062E 03	-0.26348E 03	0.23199E 03	-0.	-0.	1.00
-0.78111E 02	0.13232E 03	-0.13106E 03	0.16632E 03	-0.	-0.	1.00
-0.44430E 02	0.11204E 03	-0.76822E 02	0.87647E 02	-0.	-0.	1.00
-0.90047E 02	0.11852E 03	-0.86203E 02	0.92763E 02	-0.	-0.	1.00
-0.30166E 02	0.11201E 03	-0.75352E 02	0.69486E 02	-0.	-0.	1.00
-0.18179E 02	0.10695E 03	-0.63436E 02	0.33440E 02	-0.	-0.	1.00
-0.15431E 02	0.10509E 03	-0.67709E 02	0.50974E 02	-0.	-0.	1.00
-0.15197E 02	0.10248E 03	-0.71829E 02	0.47999E 02	0.	0.	1.00
-0.16899E 02	0.10560E 03	-0.67142E 02	0.62213E 02	0.	0.	1.00
-0.18488E 02	0.11238E 03	-0.96842E 02	0.79548E 02	0.	0.	1.00
-0.12326E 02	0.11298E 03	-0.80160E 02	0.73594E 02	0.	0.	1.00
-0.26409E 01	0.10892E 03	-0.59834E 02	0.51141E 02	0.	0.	1.00
-0.62304E 01	0.10609E 03	-0.46733E 02	0.36934E 02	0.	0.	1.00
-0.15441E 02	0.10258E 03	-0.46202E 02	0.16323E 02	0.	0.	1.00
-0.25469E 02	0.10247E 03	-0.33964E 02	-0.49968E 01	0.	0.	1.00
-0.45097E 02	0.10616E 03	-0.92988E 02	-0.22624E 01	0.	0.	1.00
-0.56654E 02	0.11452E 03	-0.13906E 03	0.32477E 02	0.	0.	1.00
-0.69941E 02	0.12727E 03	-0.19510E 03	0.11301E 03	0.	0.	1.00
-0.8267E 02	0.14287E 03	-0.24784E 03	0.20577E 03	0.	0.	1.00
-0.95446E 02	0.18599E 03	-0.23412E 03	0.36971E 03	0.	0.	1.00
-0.13359E 03	0.18429E 03	-0.90160E 02	0.30493E 03	0.	0.	1.00
-0.23602E 03	-0.88743E 02	0.12732E 03	-0.59766E 02	0.	-0.	1.00
-0.26845E 03	-0.10154E 03	0.13236E 03	-0.63403E 02	0.	-0.	1.00
-0.19899E 03	-0.67747E 02	0.34535E 02	-0.83552E 02	0.	-0.	1.00
-0.16050E 03	-0.55533E 02	0.70814E 00	-0.39541E 02	0.	-0.	1.00
-0.14089E 03	-0.61555E 02	-0.78477E 02	-0.86823E 01	0.	-0.	1.00
-0.17677E 03	-0.15939E 03	-0.15973E 03	0.11726E 03	0.	-0.	1.00
-0.22645E 03	-0.36710E 03	-0.22714E 03	0.34063E 03	0.	-0.	1.00
-0.21434E 02	-0.12274E 03	-0.16088E 02	0.87302E 02	0.	-0.	1.00
-0.16377E 03	-0.51119E 02	0.14932E 03	0.22172E 02	-0.	-0.	1.00
-0.13721E 03	-0.31646E 02	0.10722E 03	0.72489E 01	-0.	-0.	1.00
-0.17490E 03	-0.10388E 02	0.88297E 02	-0.52309E 01	-0.	-0.	1.00
-0.10870E 03	-0.60998E 01	0.62197E 02	-0.68999E 01	-0.	-0.	1.00
-0.10511E 03	0.65244E 01	0.56401E 02	-0.89377E 01	-0.	0.	1.00
-0.94080E 02	0.17218E 02	0.37199E 02	-0.34680E 01	-0.	0.	1.00
-0.84688E 02	0.29945E 02	0.19536E 02	0.86046E 01	-0.	0.	1.00
-0.74715E 02	0.46288E 02	-0.74234E 00	0.43012E 02	-0.	0.	1.00
-0.64591E 02	0.64364E 02	-0.13830E 02	0.10228E 03	-0.	0.	1.00
-0.48679E 02	0.58020E 02	0.41215E 01	0.86317E 02	-0.	0.	1.00
-0.93065E 01	0.52013E 02	0.11946E 03	0.66528E 02	-0.	0.	1.00
-0.70227E 01	0.46886E 02	0.12642E 03	0.46786E 02	-0.	0.	1.00
-0.67294E 01	0.43109E 02	0.12598E 03	0.31176E 02	-0.	0.	1.00
-0.75866E 01	0.39121E 02	0.12082E 03	0.63733E 01	-0.	0.	1.00
-0.11821E 02	0.44974E 02	0.89145E 02	0.21189E 02	-0.	0.	1.00
-0.60610E 00	0.17556E 02	0.91883E 02	-0.64859E 02	0.	0.	1.00
-0.77794E 02	0.46152E 02	0.14063E 03	-0.83430E 02	0.	0.	1.00
-0.99091E 01	0.14962E 02	0.23288E 02	-0.38802E 02	-0.	0.	1.00
-0.10728E 02	0.14001E 02	-0.66789E 01	-0.28218E 02	-0.	0.	1.00
-0.19616E 01	0.16923E 02	-0.23609E 02	-0.78133E 01	-0.	0.	1.00
-0.60764E 01	0.10529E 02	-0.24913E 02	0.63887E 01	0.	0.	1.00
0.12184E 02	0.	-0.17164E 02	0.	0.	0.	10.00

Table XVI --- Continued

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 260,000 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMI SPAN: 40.06 SEGMENT NUMBER: 107

INCREMENTAL BEND STRESS				INCREMENTAL AXIAL STRESS				FREQUENCY CPS
REAL	IMAGINARY			REAL	IMAGINARY			
0.29011E-00	0.47503E 02	0.	0.	0.20062E 01	-0.23202E 05	0.	0.30	0.30
0.44654E 02	0.44623E 02	0.	0.	-0.22324E 03	-0.15466E 03	0.	0.35	0.35
0.90047E 02	0.57601E 01	0.	0.	-0.53240E 03	-0.20805E 02	0.	0.36	0.36
0.10655E 03	-0.14509E 02	0.	0.	-0.36403E 03	3.51294E 02	0.	0.44	0.44
0.10040E 03	-0.32725E 02	0.	0.	-0.56153E 03	0.11520E 03	0.	0.50	0.50
0.88949E 02	-0.43448E 02	0.	0.	-0.29968E 03	0.15246E 03	0.	0.60	0.60
0.80764E 02	-0.52164E 02	0.	0.	-0.26764E 03	0.18126E 03	0.	0.70	0.70
0.75106E 02	-0.60860E 02	0.	0.	-0.24352E 03	0.20819E 05	0.	0.80	0.80
0.71517E 02	-0.70952E 02	0.	0.	-0.22421E 03	0.23707E 03	0.	0.90	0.90
0.68493E 02	-0.99010E 02	0.	0.	-0.20727E 03	0.30952E 03	0.	1.00	1.00
0.66211E 02	-0.13308E 03	0.	0.	-0.17484E 03	0.38879E 03	0.	1.20	1.20
0.64115E 02	-0.15451E 03	0.	0.	-0.14303E 05	0.43606E 03	0.	1.34	1.34
0.54487E 02	-0.17753E 03	0.	0.	-0.12204E 05	0.48524E 03	0.	1.40	1.40
0.47851E 02	-0.19157E 03	0.	0.	-0.97827E 02	0.51415E 03	0.	1.45	1.45
0.42936E 02	-0.20710E 03	0.	0.	-0.80404E 02	0.54649E 03	0.	1.47	1.47
0.36411E 02	-0.24546E 03	0.	0.	-0.59787E 02	0.62307E 05	0.	1.50	1.50
0.15733E 02	-0.29637E 03	0.	0.	-0.33920E -00	0.71504E 03	0.	1.55	1.55
-0.23648E 02	-0.34957E 03	0.	0.	0.10123E 05	0.80915E 03	0.	1.60	1.60
-0.10018E 03	-0.44512E 02	0.	0.	0.28320E 03	0.49020E 02	0.	1.65	1.65
-0.51185E 03	0.18992E 03	0.	0.	0.10564E 04	-0.36074E 03	0.	1.80	1.80
-0.28621E 03	0.18164E 03	0.	0.	0.51942E 03	-0.28939E 03	0.	1.90	1.90
-0.13881E 03	0.15080E 03	0.	0.	0.22512E 03	-0.19822E 03	0.	2.00	2.00
-0.74182E 02	0.12375E 03	0.	0.	0.11149E 03	-0.12519E 05	0.	2.10	2.10
-0.47504E 02	0.10379E 03	0.	0.	0.65639E 02	-0.74889E 02	0.	2.20	2.20
-0.34745E 02	0.10928E 07	0.	0.	0.73654E 02	-0.79259E 02	0.	2.30	2.30
-0.28450E 02	0.10248E 03	0.	0.	0.64387E 02	-0.59571E 02	0.	2.35	2.35
-0.17993E 02	0.87350E 02	0.	0.	0.54202E 02	-0.47369E 02	0.	2.40	2.40
-0.14190E 02	0.95520E 02	0.	0.	0.57853E 02	-0.43554E 02	0.	2.45	2.45
-0.16441E 02	0.93500E 02	0.	0.	0.61373E 02	-0.41011E 02	0.	2.44	2.44
-0.19613E 02	0.98321E 02	0.	0.	0.74457E 02	-0.53157E 02	0.	2.47	2.47
-0.22416E 02	0.10723E 03	0.	0.	0.82744E 02	-0.67960E 02	0.	2.50	2.50
-0.14234E 02	0.10825E 03	0.	0.	0.68449E 02	-0.62861E 02	0.	2.54	2.54
-0.42879E 01	0.10375E 03	0.	0.	0.51141E 02	-0.45697E 02	0.	2.58	2.58
0.84847E 01	0.10056E 03	0.	0.	0.39947E 02	-0.51550E 02	0.	2.65	2.65
0.14862E 02	0.96393E 02	0.	0.	0.39476E 02	-0.13547E 02	0.	2.70	2.70
0.24766E 02	0.94570E 02	0.	0.	0.44100E 02	-0.42694E 01	0.	2.80	2.80
0.43307E 02	0.96897E 02	0.	0.	0.79452E 02	-0.19330E 01	0.	3.00	3.00
0.51849E 02	0.10325E 03	0.	0.	0.11113E 03	-0.27749E 02	0.	3.10	3.10
0.65015E 02	0.11449E 03	0.	0.	0.16670E 03	-0.96550E 02	0.	3.20	3.20
0.70926E 02	0.12952E 03	0.	0.	0.21170E 03	-3.17582E 00	0.	3.26	3.26
0.78192E 02	0.17171E 03	0.	0.	0.21713E 05	-0.31549E 03	0.	3.29	3.29
0.11940E 03	0.17109E 03	0.	0.	0.77036E 02	-0.26854E 03	0.	3.35	3.35
0.21455E 03	-0.74991E 02	0.	0.	-0.10888E 03	0.51065E 02	0.	3.40	3.40
0.24592E 03	-0.86632E 02	0.	0.	-0.11309E 03	0.72971E 02	0.	3.52	3.52
0.18470E 03	-0.74771E 02	0.	0.	-0.46614E 02	0.71389E 02	0.	3.56	3.56
0.15119E 03	-0.47735E 02	0.	0.	-0.60506E 00	0.50874E 02	0.	3.60	3.60
0.13566E 03	-0.57072E 02	0.	0.	0.67053E 02	0.74186E 01	0.	3.75	3.75
0.17041E 03	-0.15274E 03	0.	0.	0.13440E 01	-0.10021E 03	0.	3.85	3.85
0.21598E 03	-0.34741E 03	0.	0.	0.19407E 03	-0.29105E 03	0.	4.00	4.00
0.16883E 02	-0.11263E 03	0.	0.	0.13746E 02	-0.74595E 02	0.	4.20	4.20
-0.15612E 03	-0.45829E 02	0.	0.	-0.12759E 03	-0.18945E 02	0.	4.30	4.30
-0.12704E 03	-0.78004E 02	0.	0.	-0.91615E 02	-0.61937E 01	0.	4.70	4.70
-0.11472E 03	-0.89511E 01	0.	0.	-0.75443E 02	0.44694E 01	0.	4.80	4.80
-0.98513E 02	-0.51949E 01	0.	0.	-0.53514E 02	0.58955E 01	0.	4.96	4.96
-0.94905E 02	0.55711E 01	0.	0.	-0.48191E 02	0.76360E 01	0.	5.00	5.00
-0.81796E 02	0.14164E 02	0.	0.	-0.31764E 02	0.46721E 01	0.	5.15	5.15
-0.74743E 02	0.23403E 02	0.	0.	-0.16692E 02	-0.73520E 01	0.	5.30	5.30
-0.64094E 02	0.13505E 02	0.	0.	0.63423E 00	-0.38460E 02	0.	5.70	5.70
-0.56495E 02	0.43256E 02	0.	0.	0.13525E 02	-0.87395E 02	0.	5.78	5.78
-0.43541E 02	0.60046E 02	0.	0.	-0.35714E 01	-0.75461E 02	0.	5.85	5.85
-0.21740E 02	0.37142E 02	0.	0.	-0.10207E 03	-0.56844E 02	0.	6.00	6.00
-0.20170E 02	0.36720E 02	0.	0.	-0.10801E 03	-0.19976E 02	0.	6.05	6.05
-0.19975E 02	0.12994E 02	0.	0.	-0.10764E 03	-0.26637E 02	0.	6.06	6.06
-0.20127E 02	0.31641E 02	0.	0.	-0.10323E 03	-0.54457E 01	0.	6.08	6.08
-0.20703E 02	0.74618E 02	0.	0.	-0.76160E 02	-0.10105E 02	0.	6.20	6.20
-0.11866E 02	0.20885E 02	0.	0.	-0.78508E 02	0.38329E 02	0.	6.40	6.40
0.66492E 00	0.16807E 02	0.	0.	-0.12014E 05	0.72994E 02	0.	6.60	6.60
-0.12101E 02	0.20623E 12	0.	0.	-0.14898E 02	0.50071E 02	0.	7.00	7.00
-0.87533E 01	0.20909E 02	0.	0.	0.57067E 01	0.24111E 02	0.	7.40	7.40
0.51427E 00	0.17071E 02	0.	0.	0.20172E 02	0.67631E 01	0.	8.20	8.20
0.51671E 01	0.97759E 01	0.	0.	0.21280E 02	-0.53905E 01	0.	9.00	9.00
0.13327E 02	0.	0.	0.	0.14465E 02	0.	0.	10.00	10.00

Table XVI - - - Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 268,000 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

BODY BALANCE STATION: 540 SEGMENT NUMBER 17

INCREMENTAL SHEAR STRESS REAL (MAG) IMAG						PRESSURE
						PSI
-0.49923E-01	-0.13170E 01	0.	-0.	0.	-0.	0.10
-0.17275E 01	-0.66327E 00	0.	-0.	0.	-0.	0.20
-0.22837E 01	0.14195E-00	0.	-0.	0.	-0.	0.30
-0.22518E 01	6.55171E 00	0.	-0.	0.	-0.	0.40
-0.20058E 01	0.81240E 00	0.	-0.	0.	-0.	0.50
-0.14647E 01	0.92139E 00	0.	-0.	0.	-0.	0.60
-0.14659E 01	0.99004E 00	0.	-0.	0.	-0.	0.70
-0.13068E 01	0.10542E 01	0.	-0.	0.	-0.	0.80
-0.12197E 01	0.11321E 01	0.	-0.	0.	-0.	0.90
-0.11663E 01	0.13765E 01	0.	-0.	0.	-0.	1.00
-0.11312E 01	0.17055E 01	0.	-0.	0.	-0.	1.10
-0.11299E 01	0.19174E 01	0.	-0.	0.	-0.	1.20
-0.11193E 01	0.21477E 01	0.	-0.	0.	-0.	1.30
-0.10925E 01	0.22872E 01	0.	-0.	0.	-0.	1.40
-0.10675E 01	0.24469E 01	0.	-0.	0.	-0.	1.50
-0.10501E 01	0.26412E 01	0.	-0.	0.	-0.	1.60
-0.09933E 00	0.33576E 01	0.	-0.	0.	-0.	1.70
-0.09813E 00	0.39790E 01	-0.	-0.	-0.	-0.	1.80
0.37873E-01	0.18984E 01	-0.	-0.	-0.	-0.	1.90
0.41681E 01	-0.66833E 00	-0.	0.	-0.	0.	2.00
0.73039E 01	-0.66573E 00	-0.	0.	-0.	0.	2.10
0.48277E 00	-0.33028E-00	-0.	0.	-0.	0.	2.20
0.70564E-00	0.48503E-01	-0.	0.	-0.	0.	2.30
-0.11667E-00	0.47288E-00	-0.	-0.	-0.	-0.	2.40
-0.27806E-00	0.60652E 00	-0.	-0.	-0.	-0.	2.50
-0.30556E-00	0.85997E 00	-0.	-0.	-0.	-0.	2.60
-0.29293E-00	0.10162E 01	-0.	-0.	-0.	-0.	2.70
-0.17508E-00	0.10654E 01	-0.	-0.	-0.	-0.	2.80
-0.91834E-01	0.10537E 01	-0.	-0.	-0.	-0.	2.90
0.29746E-00	0.74317E 00	-0.	-0.	-0.	-0.	3.00
0.42741E-00	0.30614E-00	-0.	-0.	-0.	-0.	3.10
0.13648E-00	0.31648E-00	-0.	-0.	-0.	-0.	3.20
-0.29726E-00	0.67677E 00	-0.	-0.	-0.	-0.	3.30
-0.70151E 00	0.97545E 00	0.	-0.	0.	-0.	3.40
-0.85476E 00	0.15905E 01	0.	-0.	0.	-0.	3.50
-0.10220E 01	0.33199E 01	0.	-0.	0.	-0.	3.60
-0.10703E 01	0.47446E 01	0.	-0.	0.	-0.	3.70
-0.88959E 00	0.71972E 01	0.	-0.	0.	-0.	3.80
-0.38619E-00	0.10033E 02	-0.	-0.	-0.	-0.	3.90
0.47738E-00	0.17618E 02	-0.	-0.	-0.	-0.	4.00
0.18362E 01	0.17433E 02	-0.	-0.	-0.	-0.	4.10
0.91356E 01	0.15730E 02	-0.	-0.	-0.	-0.	4.20
0.71350E 02	-0.20288E 02	-0.	0.	-0.	0.	4.30
0.71750E 02	-0.21764E 02	-0.	0.	-0.	0.	4.40
0.11088E 02	-0.19559E 02	-0.	0.	-0.	0.	4.50
0.43826E 01	-0.13334E 02	-0.	0.	-0.	0.	4.60
-0.71734E 01	-0.76597E 01	0.	0.	0.	0.	4.70
-0.64150E 01	-0.19242E 01	0.	0.	0.	0.	4.80
-0.85701E 01	0.59906E 01	0.	-0.	0.	-0.	4.90
-0.74409E 01	0.16795E-01	0.	-0.	0.	-0.	5.00
0.74986E 01	-0.13846E 01	-0.	0.	-0.	0.	5.10
0.14329E 01	-0.16489E 01	-0.	0.	-0.	0.	5.20
0.94502E 00	-0.16127E 01	-0.	0.	-0.	0.	5.30
0.75993E-00	-0.16212E 01	-0.	0.	-0.	0.	5.40
0.95385E 01	-0.17674E 01	-0.	0.	-0.	0.	5.50
-0.46247E-00	-0.15716E 01	-0.	0.	-0.	0.	5.60
-0.10502E 01	-0.97463E 00	0.	0.	0.	0.	5.70
-0.19087E 01	0.80594E 00	0.	-0.	0.	-0.	5.80
-0.78820E 01	0.42901E 01	0.	-0.	0.	-0.	5.90
-0.70926E 01	0.39455E 01	0.	-0.	0.	-0.	6.00
0.57127E 01	0.27594E 01	-0.	-0.	-0.	-0.	6.10
0.64181E 01	0.89949E 00	-0.	-0.	-0.	-0.	6.20
0.85625E 01	-0.86135E 00	-0.	0.	-0.	0.	6.30
0.431150E 01	-0.40820E 01	-0.	0.	0.	0.	6.40
0.16167E 01	-0.53717E 01	-0.	0.	0.	0.	6.50
-0.13054E 01	-0.49106E-00	0.	0.	0.	0.	6.60
-0.52076E 01	0.13681E 01	0.	-0.	0.	-0.	6.70
-0.19495E-00	0.46397E-00	-0.	-0.	-0.	-0.	6.80
0.24897E-00	0.11715E-01	-0.	-0.	-0.	-0.	6.90
0.17297E-00	-0.85347E-01	-0.	-0.	-0.	-0.	7.00
0.66220E-01	-0.11990E-00	-0.	-0.	-0.	-0.	7.10
0.17472E-01	0.	-0.	0.	-0.	0.	7.20

Table XVI --- Concluded

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 268,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

BODY BALANCE STATION 820 SEGMENT NUMBER 1

INCORPORATED AXIAL STRESS						FREQUENCY CPS
		REAL	IMAGINARY			
0.	0.	0.19861E 01	0.12202E 03	0.	0.	0.10
0.	0.	0.15570E 05	0.74433E 02	0.	0.	0.20
0.	0.	0.19119E 05	0.12575E -00	0.	0.	0.30
0.	-0.	0.19999E 03	-0.36505E 02	0.	-0.	0.40
0.	-0.	0.18426E 05	-0.66417E 02	0.	-0.	0.50
0.	-0.	0.15874E 03	-0.02477E 02	0.	-0.	0.60
0.	-0.	0.14090E 05	-0.94470E 02	0.	-0.	0.70
0.	-0.	0.12854E 05	-0.10979E 03	0.	-0.	0.80
0.	-0.	0.11962E 03	-0.11033E 03	0.	-0.	0.90
0.	-0.	0.11171E 03	-0.15150E 03	0.	-0.	1.00
0.	-0.	0.10176E 03	-0.10952E 03	0.	-0.	1.20
0.	-0.	0.91757E 02	-0.21247E 03	0.	-0.	1.30
0.	-0.	0.84650E 02	-0.25652E 03	0.	-0.	1.40
0.	-0.	0.732E 02	-0.25071E 03	0.	-0.	1.50
0.	-0.	0.61405E 02	-0.26666E 03	0.	-0.	1.60
0.	-0.	0.51605E 02	-0.30471E 03	0.	-0.	1.70
0.	-0.	0.37666E 02	-0.35162E 03	0.	-0.	1.80
-0.	-0.	-0.33421E 01	-0.40167E 03	-0.	-0.	1.90
-0.	-0.	-0.05172E 02	-0.00783E 02	-0.	-0.	2.00
-0.	0.	-0.46167E 03	0.12020E 03	-0.	0.	2.10
-0.	0.	-0.22474E 05	0.90614E 02	-0.	0.	2.20
-0.	0.	-0.04671E 02	0.44676E 02	-0.	0.	2.30
-0.	0.	-0.27704E 02	0.25494E 01	-0.	0.	2.40
-0.	-0.	-0.15655E 01	-0.34904E 02	-0.	-0.	2.50
-0.	-0.	-0.48540E 01	-0.43254E 02	-0.	-0.	2.60
-0.	-0.	-0.58407E 01	-0.63865E 02	-0.	-0.	2.70
-0.	-0.	-0.68058E 01	-0.75735E 02	-0.	-0.	2.80
-0.	-0.	-0.17599E 02	-0.70236E 02	-0.	-0.	2.90
-0.	-0.	-0.24594E 02	-0.77000E 02	-0.	-0.	3.00
-0.	-0.	-0.48228E 02	-0.94000E 02	-0.	-0.	3.10
-0.	-0.	-0.64105E 02	-0.24223E 02	-0.	-0.	3.20
-0.	-0.	-0.45754E 02	-0.27360E 02	-0.	-0.	3.30
-0.	-0.	-0.15611E 02	-0.54645E 02	-0.	-0.	3.40
-0.	-0.	0.52787E 01	-0.75316E 02	0.	-0.	3.50
-0.	-0.	0.95254E 01	-0.11449E 03	0.	-0.	3.60
-0.	-0.	0.59499E 01	-0.20922E 03	0.	-0.	3.70
-0.	-0.	-0.35644E 02	-0.27514E 03	-0.	-0.	3.80
-0.	-0.	-0.07803E 02	-0.35844E 03	-0.	-0.	3.90
-0.	-0.	-0.19445E 05	-0.40540E 03	-0.	-0.	4.00
-0.	-0.	-0.51044E 03	-0.41905E 03	-0.	-0.	4.10
-0.	-0.	-0.39597E 03	-0.43868E 03	-0.	-0.	4.20
-0.	-0.	-0.57364E 05	-0.41330E 03	-0.	-0.	4.30
-0.	0.	-0.91630E 03	0.96583E 03	-0.	0.	4.40
-0.	0.	-0.88818E 03	0.10054E 04	-0.	0.	4.50
-0.	0.	-0.45510E 03	0.00094E 03	-0.	0.	4.60
-0.	0.	-0.15554E 03	0.38064E 03	-0.	0.	4.70
0.	0.	0.12050E 03	0.33450E 03	0.	0.	4.80
0.	0.	0.22216E 03	0.11216E 03	0.	0.	4.90
0.	-0.	0.24492E 03	-0.24409E 02	0.	-0.	5.00
0.	0.	0.00081E 02	0.03443E 02	0.	0.	5.10
0.	0.	0.23552E 02	0.04314E 02	0.	0.	5.20
0.	0.	0.54239E 02	0.77781E 02	0.	0.	5.30
0.	0.	0.65869E 02	0.63041E 02	0.	0.	5.40
0.	0.	0.00000E 02	0.30751E 02	0.	0.	5.50
0.	0.	0.04553E 02	0.43971E 02	0.	0.	5.60
0.	0.	0.05579E 02	0.24360E 02	0.	0.	5.70
0.	-0.	0.10493E 01	-0.10984E 02	0.	-0.	5.80
0.	-0.	0.11775E 03	-0.02749E 02	0.	-0.	5.90
0.	-0.	0.15419E 05	-0.10500E 03	0.	-0.	6.00
0.	-0.	0.92745E 02	-0.17331E 03	0.	-0.	6.10
-0.	-0.	-0.14964E 03	-0.12745E 03	-0.	-0.	6.20
-0.	-0.	-0.16764E 03	-0.04740E 02	-0.	-0.	6.30
-0.	-0.	-0.17007E 03	-0.40267E 02	-0.	-0.	6.40
-0.	-0.	-0.16192E 03	0.27433E 02	-0.	0.	6.50
-0.	-0.	-0.93856E 02	0.33772E 02	-0.	0.	6.60
-0.	-0.	-0.25055E 02	0.15525E 02	-0.	0.	6.70
-0.	-0.	-0.99005E 01	0.10231E 02	-0.	0.	6.80
0.	0.	0.22013E 01	0.79878E 01	0.	0.	6.90
0.	-0.	0.95612E 01	-0.38849E 01	0.	-0.	7.00
0.	-0.	0.00714E 01	-0.08779E 01	0.	-0.	7.10
0.	-0.	0.25679E 01	-0.04422E 01	0.	-0.	7.20
-0.	0.	-0.46770E 01	0.	-0.	0.	7.30

Table XVII Stress Frequency Response Functions (Analysis Condition 3)

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 190,590 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMI SPAN: 27 SEGMENT NUMBER 10

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY
REAL	IMAGINARY	REAL	IMAGINARY			
0.14448E 01	0.16311E 02	0.15029E 02	0.19340E 03	-0.	-0.	0.00
0.23312E 02	0.10499E 02	0.26795E 03	0.12602E 03	-0.	-0.	0.00
0.29478E 02	0.18436E 01	0.33885E 03	0.24623E 02	-0.	-0.	0.00
0.42320E 02	-0.35651E 01	0.36973E 03	-0.38467E 02	-0.	0.	0.00
0.31995E 02	-0.96094E 01	0.34179E 03	-0.10708E 03	-0.	0.	0.00
0.30427E 02	-0.11961E 02	0.33581E 03	-0.15287E 03	-0.	0.	0.00
0.29086E 02	-0.17861E 02	0.31032E 03	-0.18951E 03	-0.	0.	0.00
0.28241E 02	-0.21951E 02	0.28852E 03	-0.22319E 03	-0.	0.	0.00
0.27851E 02	-0.26813E 02	0.26987E 03	-0.25723E 03	-0.	0.	0.00
0.27835E 02	-0.41892E 02	0.25298E 03	-0.34250E 03	-0.	0.	0.00
0.28464E 02	-0.58514E 02	0.22065E 03	-0.43151E 03	-0.	0.	0.00
0.28436E 02	-0.69752E 02	0.19020E 03	-0.48371E 03	-0.	-0.	0.00
0.27376E 02	-0.81903E 02	0.17022E 03	-0.53764E 03	0.	-0.	0.00
0.25354E 02	-0.89239E 02	0.14695E 03	-0.56922E 03	0.	-0.	0.00
0.23650E 02	-0.97617E 02	0.13161E 03	-0.60452E 03	0.	-0.	0.00
0.21347E 02	-0.11875E 03	0.11270E 03	-0.68844E 03	0.	-0.	0.00
0.19389E 02	-0.14534E 03	0.98705E 02	-0.79270E 03	0.	-0.	0.00
-0.24248E 01	-0.17904E 03	-0.32451E 02	-0.91156E 03	-0.	-0.	0.00
-0.34978E 02	-0.25746E 02	-0.19561E 03	-0.35480E 03	-0.	-0.	0.00
-0.30621E 03	0.15098E 03	-0.12468E 04	0.37398E 03	-0.	-0.	0.00
-0.21799E 03	0.13190E 03	-0.73854E 03	0.34806E 03	-0.	-0.	0.00
-0.10799E 03	0.11983E 03	-0.32130E 03	0.24510E 03	-0.	0.	0.00
-0.59444E 02	0.10924E 03	-0.15685E 03	0.16000E 03	-0.	0.	0.00
-0.32344E 02	0.98963E 02	-0.65435E 02	0.92564E 02	-0.	0.	0.00
-0.10713E 02	0.90871E 02	-0.64132E 02	0.70562E 02	-0.	0.	0.00
-0.66259E 01	0.87532E 02	-0.58881E 02	0.40768E 02	0.	0.	0.00
-0.40966E 01	0.85662E 02	-0.60136E 02	0.24295E 02	0.	0.	0.00
-0.30234E 01	0.84923E 02	-0.71197E 02	0.18922E 02	0.	0.	0.00
-0.24642E 01	0.84074E 02	-0.78696E 02	0.15855E 02	0.	0.	0.00
-0.42774E 01	0.87021E 02	-0.10599E 03	0.39935E 02	0.	0.	0.00
-0.64551E 01	0.95449E 02	-0.12971E 03	0.82225E 02	0.	0.	0.00
-0.31523E 01	0.99937E 02	-0.11241E 03	0.85780E 02	0.	0.	0.00
0.52714E 01	0.10202E 03	-0.76892E 02	0.60623E 02	0.	0.	0.00
0.18495E 02	0.10311E 03	-0.47975E 02	0.42636E 02	0.	0.	0.00
0.26948E 02	0.10649E 03	-0.41788E 02	0.35439E 02	0.	0.	0.00
0.44515E 02	0.11789E 03	-0.43386E 02	-0.20305E 02	0.	0.	0.00
0.10112E 03	0.12709E 03	-0.74815E 02	-0.28794E 02	0.	0.	0.00
0.14853E 03	0.87071E 02	-0.10682E 03	-0.14418E 02	0.	0.	0.00
0.27243E 03	-0.23708E 03	-0.16623E 03	0.41240E 02	0.	-0.	0.00
0.37616E 03	-0.14321E 03	-0.21574E 03	0.10878E 03	0.	-0.	0.00
0.40213E 03	-0.38637E 03	-0.22334E 03	0.20511E 03	0.	-0.	0.00
0.14671E 03	-0.28507E 03	-0.11243E 03	0.15194E 03	0.	-0.	0.00
-0.36681E 02	-0.42738E 02	-0.10562E 02	0.35139E 02	-0.	-0.	0.00
-0.58021E 02	-0.17649E 02	-0.94073E 01	0.18592E 02	-0.	0.	0.00
-0.24044E 02	-0.35874E 00	-0.22697E 02	0.70359E 01	0.	0.	0.00
0.18882E 02	-0.77998E 02	-0.36277E 02	-0.11790E 02	0.	-0.	0.00
0.13444E 01	-0.19200E 03	-0.73584E 02	0.23942E 00	0.	-0.	0.00
-0.56504E 02	-0.67322E 02	-0.15221E 03	0.87804E 02	-0.	-0.	0.00
-0.11929E 03	-0.28335E 02	-0.23117E 03	0.35327E 03	-0.	-0.	0.00
-0.40218E 02	-0.12788E 02	-0.14905E 03	0.18742E 03	-0.	-0.	0.00
-0.78982E 01	-0.16731E 02	0.18127E 03	0.77441E 02	-0.	-0.	0.00
-0.17445E 02	-0.15118E 02	0.16537E 03	0.47575E 02	-0.	-0.	0.00
-0.20640E 02	-0.11236E 02	0.15060E 03	0.16191E 02	-0.	-0.	0.00
-0.23460E 02	-0.10142E 02	0.12865E 03	0.10136E 02	-0.	-0.	0.00
-0.23860E 02	-0.62945E 01	0.12344E 03	-0.67784E 01	-0.	-0.	0.00
-0.24615E 02	-0.24302E 01	0.10700E 03	-0.19493E 02	-0.	0.	0.00
-0.24601E 02	0.22622E 01	0.92136E 02	-0.31394E 02	-0.	0.	0.00
-0.23706E 02	0.69024E 01	0.75442E 02	-0.40357E 02	-0.	0.	0.00
-0.22012E 02	0.10229E 02	0.60075E 02	-0.45416E 02	-0.	0.	0.00
-0.20307E 02	0.13951E 02	0.49704E 02	-0.49940E 02	-0.	0.	0.00
-0.17861E 02	0.14630E 02	0.38804E 02	-0.56655E 02	-0.	0.	0.00
-0.17343E 02	0.15325E 02	0.31888E 02	-0.51353E 02	-0.	0.	0.00
-0.16746E 02	0.16036E 02	0.34947E 02	-0.52037E 02	-0.	0.	0.00
-0.16145E 02	0.19460E 02	0.32976E 02	-0.54905E 02	-0.	0.	0.00
-0.12723E 02	0.25307E 02	0.23487E 02	-0.57259E 02	-0.	0.	0.00
-0.94206E 00	0.89019E 01	0.25455E 01	-0.34020E 02	0.	0.	0.00
0.24026E 02	-0.38088E 01	-0.23228E 02	-0.30455E 02	0.	-0.	0.00
-0.94514E 01	0.54895E 01	-0.68373E 01	-0.27879E 02	-0.	0.	0.00
-0.73624E 01	0.62638E 01	-0.52461E 02	0.19606E 02	0.	-0.	0.00
-0.64885E 01	0.89025E 01	0.23464E 02	-0.45361E 01	-0.	0.	0.00
-0.19473E 01	0.78713E 01	0.12694E 02	-0.63699E 01	-0.	0.	0.00
0.28407E 01	0.	0.33263E 01	0.	0.	0.	0.00

Table XVII --- Continued

(PSIFPS SINUSOIDAL GUST)

GROSS WEIGHT: 190,590 LB CUTOFF FREQUENCY: 10 CFS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMISPAN 27 SEGMENT NUMBER 14

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY CFS
REAL	IMAGINARY	REAL	IMAGINARY			
0.54070E 01	0.44912E 02	0.13639E 02	0.17550E 03	-0.	-0.	0.35
0.40784E 02	0.41099E 02	0.24135E 03	0.11436E 03	-0.	-0.	0.36
0.11506E 01	0.79387E 01	0.30733E 03	0.22345E 02	-0.	-0.	0.37
0.12478E 01	-0.11067E 02	0.33441E 03	-0.34926E 02	-0.	-0.	0.38
0.12247E 03	-0.35737E 02	0.32031E 03	-0.07169E 02	-0.	-0.	0.39
0.11386E 03	-0.40920E 02	0.30474E 03	-0.13072E 03	-0.	-0.	0.40
0.10583E 01	-0.45227E 02	0.28161E 03	-0.1E197E 03	-0.	-0.	0.41
0.09115E 02	-0.74857E 02	0.26183E 03	-0.20254E 03	-0.	-0.	0.42
0.04164E 02	-0.87614E 02	0.24490E 03	-0.23434E 03	-0.	-0.	0.43
0.09913E 07	-0.11969E 03	0.22757E 03	-0.31001E 03	-0.	-0.	0.44
0.02833E 02	-0.15462E 03	0.20524E 03	-0.39159E 03	-0.	-0.	0.45
0.76033E 02	-0.17887E 03	0.17242E 03	-0.43095E 03	-0.	-0.	0.46
0.70883E 02	-0.20263E 03	0.15447E 03	-0.48199E 03	-0.	-0.	0.47
0.64090E 02	-0.21678E 03	0.13333E 03	-0.51655E 03	-0.	-0.	0.48
0.59269E 02	-0.23280E 03	0.11943E 03	-0.54859E 03	-0.	-0.	0.49
0.54033E 02	-0.27164E 03	0.10227E 03	-0.62674E 03	-0.	-0.	0.50
0.53960E 02	-0.32155E 03	0.33274E 02	-0.71935E 03	-0.	-0.	0.51
-0.03919E 00	-0.38168E 03	-0.29448E 02	-0.82722E 03	-0.	-0.	0.52
-0.67411E 02	-0.17702E 03	-0.17751E 03	-0.32196E 03	-0.	-0.	0.53
-0.56721E 01	0.14302E 03	-0.11314E 04	0.33938E 03	-0.	-0.	0.54
-0.17109E 01	0.19742E 03	-0.67021E 03	0.31595E 03	-0.	-0.	0.55
-0.17714E 03	0.16459E 03	-0.29157E 03	0.22742E 03	-0.	-0.	0.56
-0.07912E 02	0.13609E 01	-0.14234E 03	0.16519E 03	-0.	-0.	0.57
-0.40202E 02	0.11106E 03	-0.77533E 02	0.04000E 02	-0.	-0.	0.58
-0.25263E 02	0.09954E 02	-0.52198E 02	0.04036E 02	-0.	-0.	0.59
-0.20033E 02	0.09501E 02	-0.53370E 02	0.36996E 02	-0.	-0.	0.60
-0.17651E 02	0.03440E 02	-0.54572E 02	0.22047E 02	-0.	-0.	0.61
-0.19592E 02	0.01647E 02	-0.64653E 02	0.17171E 02	-0.	-0.	0.62
-0.21621E 02	0.30476E 02	-0.71413E 02	0.14388E 02	-0.	-0.	0.63
-0.30702E 02	0.01094E 02	-0.96094E 02	0.36240E 02	-0.	-0.	0.64
-0.39992E 02	0.11313E 03	-0.11771E 03	0.76617E 02	-0.	-0.	0.65
-0.31835E 02	0.12016E 03	-0.10231E 03	0.77843E 02	-0.	-0.	0.66
-0.12741E 02	0.11737E 03	-0.69776E 02	0.35014E 02	-0.	-0.	0.67
0.10140E 02	0.11429E 03	-0.43471E 02	0.38691E 02	-0.	-0.	0.68
0.21745E 02	0.11212E 03	-0.37922E 02	0.14006E 02	-0.	-0.	0.69
0.42117E 02	0.11692E 03	-0.39372E 02	-0.18626E 02	-0.	-0.	0.70
0.10292E 03	0.11647E 03	-0.67292E 02	-0.26138E 02	-0.	-0.	0.71
0.16343E 03	0.73727E 02	-0.96939E 02	-0.13064E 02	-0.	-0.	0.72
0.29219E 01	-0.53210E 02	-0.15003E 03	0.37624E 02	-0.	-0.	0.73
0.41049E 01	-0.21459E 01	-0.19905E 03	0.98716E 02	-0.	-0.	0.74
0.43726E 01	-0.67213E 01	-0.20269E 01	0.18613E 03	-0.	-0.	0.75
0.18982E 01	-0.17213E 01	-0.10203E 03	0.13788E 03	-0.	-0.	0.76
-0.74967E 02	-0.45432E 02	-0.95044E 01	0.31088E 02	-0.	-0.	0.77
-0.11049E 03	-0.36259E 02	-0.85349E 01	0.16872E 03	-0.	-0.	0.78
-0.88949E 02	-0.30726E 02	-0.70597E 02	0.63849E 01	-0.	-0.	0.79
-0.49913E 02	-0.40111E 02	-0.12921E 02	-0.10663E 02	-0.	-0.	0.80
0.55627E 02	-0.18474E 03	-0.66776E 02	0.21727E 00	-0.	-0.	0.81
-0.13206E 01	-0.35094E 02	-0.13813E 01	0.79680E 02	-0.	-0.	0.82
-0.21133E 01	0.14493E 01	-0.20979E 03	0.32059E 03	-0.	-0.	0.83
-0.11091E 01	0.49655E 02	-0.13327E 03	0.17008E 03	-0.	-0.	0.84
0.64417E 02	0.90545E 01	0.16450E 03	0.70296E 02	-0.	-0.	0.85
0.30294E 02	0.84373E 00	0.15007E 03	0.43173E 02	-0.	-0.	0.86
0.22917E 02	-0.37043E 01	0.13667E 03	0.14643E 02	-0.	-0.	0.87
0.13767E 02	-0.46571E 01	0.11673E 03	0.42000E 01	-0.	-0.	0.88
0.11815E 02	-0.86646E 01	0.11756E 03	-0.61312E 01	-0.	-0.	0.89
0.13032E 01	-0.96443E 01	0.07120E 02	-0.17689E 02	-0.	-0.	0.90
0.20079E 01	-0.96771E 01	0.03611E 02	-0.28689E 02	-0.	-0.	0.91
-0.21344E 01	-0.89152E 01	0.68462E 02	-0.34623E 02	-0.	-0.	0.92
-0.51795E 01	-0.82731E 01	0.54517E 02	-0.41216E 02	-0.	-0.	0.93
-0.72440E 01	-0.73968E 01	0.45105E 02	-0.45319E 02	-0.	-0.	0.94
-0.40107E 01	-0.72228E 01	0.35214E 02	-0.43908E 02	-0.	-0.	0.95
-0.72943E 01	-0.70408E 01	0.31473E 02	-0.46602E 02	-0.	-0.	0.96
-0.95724E 01	-0.68000E 01	0.31714E 02	-0.47222E 02	-0.	-0.	0.97
-0.48651E 01	-0.38519E 01	0.29923E 02	-0.49895E 02	-0.	-0.	0.98
-0.10999E 02	-0.37044E 01	0.21314E 02	-0.51691E 02	-0.	-0.	0.99
-0.12237E 02	-0.12037E 01	0.23132E 01	-0.50871E 02	-0.	-0.	1.00
-0.37799E 02	-0.87649E 01	-0.21079E 02	-0.50893E 02	-0.	-0.	1.01
-0.14781E 02	-0.95591E 00	-0.62044E 01	-0.75300E 02	-0.	-0.	1.02
-0.17745E 02	0.25028E 02	-0.47607E 02	-0.1E702E 02	-0.	-0.	1.03
0.44149E 01	0.10349E 02	0.21703E 02	-0.1E164E 01	-0.	-0.	1.04
0.44886E 01	0.44199E 01	0.13320E 02	-0.5E066E 01	-0.	-0.	1.05
0.78205E 01	0.	0.30185E 01	0.	-0.	-0.	1.06

Table XVII -- Continued

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 190,590 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMISPAN: 40.06 SEGMENT NUMBER: 8

INCIDENTAL SHEAR STRESS		INCIDENTAL AXIAL STRESS				FREQUENCY
REAL	IMAGINARY	REAL	IMAGINARY			
0.37466F 01	0.41220F 02	0.12531E 02	0.16923F 03	0.	0.	0.15
0.57041F 02	0.26936E 02	0.23143E 03	0.11044E 03	0.	0.	0.30
0.72666F 02	0.54910F 01	0.29607E 03	0.21133E 02	0.	0.	0.45
0.79364F 02	-0.79120F 01	0.32334E 03	-0.34949E 02	0.	-0.	0.60
0.78304E 02	-0.22687E 02	0.31793E 03	-0.96617E 02	0.	-0.	0.75
0.73708F 02	-0.32936E 02	0.29533E 03	-0.13846E 03	0.	-0.	0.90
0.49424E 02	-0.41708E 02	0.27373F 03	-0.17243E 03	0.	-0.	1.05
0.44111F 02	-0.50397E 02	0.25457E 03	-0.20400E 03	0.	-0.	1.20
0.43713F 02	-0.60194E 02	0.23702E 03	-0.23703E 03	0.	-0.	1.35
0.41910F 02	-0.86695E 02	0.22245E 03	-0.31656E 03	0.	-0.	1.50
0.49100F 02	-0.11779F 03	0.19150E 03	-0.40017E 03	0.	-0.	1.65
0.45329F 02	-0.13704E 03	0.16102E 03	-0.44894E 03	0.	-0.	1.80
0.51734F 02	-0.15741F 03	0.14116E 03	-0.49914E 03	0.	-0.	1.95
0.46944E 02	-0.16973E 03	0.11700F 03	-0.52044E 03	0.	-0.	2.10
0.42727E 02	-0.18337E 03	0.10261E 03	-0.56112E 03	0.	-0.	2.25
0.37649F 02	-0.21721E 03	0.83875E 02	-0.63842E 03	0.	-0.	2.40
0.21708F 02	-0.26049E 03	0.30813E 02	-0.73357E 03	0.	-0.	2.55
-0.77569F 01	-0.31270F 03	-0.57712E 02	-0.84009F 03	-0.	-0.	2.70
-0.46920F 02	-0.13496E 03	-0.21412E 03	-0.28708E 03	-0.	-0.	2.85
-0.49710F 03	0.17736F 03	-0.11798E 04	0.37720E 03	-0.	-0.	3.00
-0.32534F 03	0.18889F 03	-0.68102E 03	0.33776E 03	-0.	-0.	3.15
-0.15567F 03	0.15859E 03	-0.24179E 03	0.23346E 03	-0.	-0.	3.30
-0.1741E 02	0.13070E 03	-0.14217E 03	0.14630F 03	-0.	-0.	3.45
-0.45463F 02	0.16861E 03	-0.81303E 02	0.84489E 02	-0.	-0.	3.60
-0.39274E 02	0.11451E 03	-0.80321E 02	0.88161E 02	-0.	-0.	3.75
-0.30466F 02	0.10732F 03	-0.77640E 02	0.63333E 02	-0.	-0.	3.90
-0.18769F 02	0.10170E 03	-0.63751E 02	0.47863E 02	-0.	-0.	4.05
-0.16329F 02	0.99563E 02	-0.70343E 02	0.42624E 02	-0.	-0.	4.20
-0.16307F 02	0.96271E 02	-0.74767E 02	0.37189E 02	-0.	-0.	4.35
-0.19011F 02	0.94411E 02	-0.92214E 02	0.31041E 02	-0.	-0.	4.50
-0.22772F 02	0.10889F 03	-0.10737E 03	0.75742E 02	-0.	-0.	4.65
-0.17549F 02	0.11085E 03	-0.93869E 02	0.73373E 02	-0.	-0.	4.80
-0.63844F 01	0.10596E 03	-0.69478E 02	0.49230E 02	-0.	-0.	4.95
0.72037E 01	0.10200E 03	-0.32293E 02	0.32033E 02	-0.	-0.	5.10
0.13713F 02	0.95416E 02	-0.50741E 02	0.79719E 01	-0.	-0.	5.25
0.29086F 02	0.87453F 02	-0.59354E 02	-0.23885E 02	-0.	-0.	5.40
0.36302F 02	0.85624E 02	-0.10746E 03	-0.27187E 02	-0.	-0.	5.55
0.48549F 02	0.87210E 02	-0.13537E 03	0.62513F 01	-0.	-0.	5.70
0.29907F 02	0.10948E 03	-0.24669E 03	0.18336E 03	-0.	-0.	5.85
0.13974F 02	0.12974E 03	-0.32144E 03	0.21672E 03	-0.	-0.	6.00
0.89375F 01	0.26339E 03	-0.32893E 03	0.37572E 03	-0.	-0.	6.15
0.59112F 02	0.20075E 03	-0.13836E 03	0.20931E 03	-0.	-0.	6.30
0.17195F 03	0.15240E 03	0.35897E 02	0.10442E 03	-0.	-0.	6.45
0.22222F 03	0.13719F 03	0.56238E 02	0.78756E 02	-0.	-0.	6.60
0.25433F 03	0.11434E 03	0.42232E 02	0.39673E 02	-0.	-0.	6.75
0.29349F 03	-0.45428F 02	0.32082E 02	0.72720E 02	-0.	-0.	6.90
0.38405F 03	-0.19171E 03	0.85473E 01	-0.16400E 02	-0.	-0.	7.05
0.17073F 01	-0.16554E 03	-0.12123E 03	0.93894E 02	-0.	-0.	7.20
0.16147F 01	-0.31380F 03	-0.21424E 03	0.54612E 03	-0.	-0.	7.35
0.2481F 02	-0.15529F 03	-0.11639E 03	0.17406E 03	-0.	-0.	7.50
-0.15428F 01	-0.47941F 02	0.20291E 03	0.63742E 02	-0.	-0.	7.65
-0.13908F 01	-0.44173E 02	0.17334E 03	0.37848E 02	-0.	-0.	7.80
-0.12704F 01	-0.12903E 02	0.15489E 03	0.10150E 02	-0.	-0.	7.95
-0.16474F 01	-0.13498E 02	0.13063E 03	0.51289E 01	-0.	-0.	8.10
-0.10574F 01	-0.89792E-01	0.12459E 03	-0.79365E 01	-0.	-0.	8.25
-0.93142F 02	0.10527F 02	0.10371E 03	-0.16264E 02	-0.	-0.	8.40
-0.81918F 02	0.20709E 02	0.49334E 02	-0.21930E 02	-0.	-0.	8.55
-0.49475F 02	0.28723E 02	0.72232E 02	-0.23711E 02	-0.	-0.	8.70
-0.48424F 02	0.33544E 02	0.36433E 02	-0.23016E 02	-0.	-0.	8.85
-0.50994F 02	0.38203E 02	0.30478E 02	-0.20409F 02	-0.	-0.	9.00
-0.43194F 02	0.38983F 02	0.44527E 02	-0.25014E 02	-0.	-0.	9.15
-0.41817E 02	0.39761F 02	0.43719E 02	-0.19362E 02	-0.	-0.	9.30
-0.40417E 02	0.40538E 02	0.42996E 02	-0.18652E 02	-0.	-0.	9.45
-0.38490F 02	0.44033F 02	0.42370F 02	-0.14707E 02	-0.	-0.	9.60
-0.37011F 02	0.44814F 02	0.41053E 02	-0.67381F 01	-0.	-0.	9.75
-0.15548F 02	0.32265E 02	0.49416E 02	-0.32034E 02	-0.	-0.	9.90
0.93017F 01	0.27154F 02	0.79697E 02	-0.48902E 02	-0.	-0.	10.05
-0.93275F 01	-0.29140F 02	0.13329F 02	-0.32193E 02	-0.	-0.	10.20
0.14961F 02	0.78601F 01	0.17467E 02	-0.40533E 02	-0.	-0.	10.35
-0.12339F 02	0.17690E 02	-0.20234E 02	-0.13383E 02	-0.	-0.	10.50
-0.55730F 00	0.13539F 02	-0.24326E 02	-0.58809E 00	-0.	-0.	10.65
0.96444F 01	0.	-0.18832E 02	0.	-0.	-0.	10.80

Table XVII -- Continued

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 190,590 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMI SPAN: 40.06 SEGMENT NUMBER 107

INCIDENTAL SHEAR STRESS				INCIDENTAL AXIAL STRESS				FREQUENCY CPS
REAL	IMAGINARY			REAL	IMAGINARY			
0.32924E 01	0.41183E 02	0.	0.	-0.10707E 02	-0.14460E 03	0.	0.10	0.10
0.57061E 02	0.26906E 02	0.	0.	-0.19770E 02	-0.94366E 02	0.	0.20	0.20
0.12546E 02	0.55479E 01	0.	0.	-0.25297E 03	-0.18056E 03	0.	0.30	0.30
0.79406E 02	-0.77276E 01	0.	0.	-0.27629E 03	0.29562E 02	0.	0.40	0.40
0.77019E 02	-0.72271E 02	0.	0.	-0.27167E 03	0.82553E 02	0.	0.50	0.50
0.73192E 02	-0.32276E 02	0.	0.	-0.27277E 03	0.11031E 03	0.	0.60	0.60
0.69005E 02	-0.40717E 02	0.	0.	-0.23308E 03	0.14733E 03	0.	0.70	0.70
0.65426E 02	-0.49030E 02	0.	0.	-0.21751E 03	0.17430E 03	0.	0.80	0.80
0.62035E 02	-0.58355E 02	0.	0.	-0.20327E 03	0.20253E 03	0.	0.90	0.90
0.61070E 02	-0.65437E 02	0.	0.	-0.19007E 03	0.27048E 03	0.	1.00	1.00
0.58245E 02	-0.71120E 03	0.	0.	-0.16369E 03	0.34182E 03	0.	1.20	1.20
0.56491E 02	-0.73114E 03	0.	0.	-0.13758E 03	0.38359E 03	0.	1.40	1.40
0.51164E 02	-0.75053E 03	0.	0.	-0.12061E 03	0.42640E 03	0.	1.60	1.60
0.46521E 02	-0.76211E 03	0.	0.	-0.10077E 03	0.45152E 03	0.	1.80	1.80
0.42949E 02	-0.77423E 03	0.	0.	-0.07676E 02	0.47944E 03	0.	2.00	2.00
0.39223E 02	-0.78714E 03	0.	0.	-0.71666E 02	0.54540E 03	0.	2.20	2.20
0.23370E 02	-0.78825E 03	0.	0.	-0.26329E 02	0.62670E 03	0.	2.40	2.40
-0.63341E 01	-0.79796E 03	-0.	-0.	0.49309E 02	0.71700E 03	0.	2.60	2.60
-0.58102E 02	-0.73254E 03	-0.	-0.	0.10299E 03	0.24529E 03	0.	2.80	2.80
-0.46703E 03	0.16375E 03	-0.	0.	0.10081E 04	-0.32230E 03	0.	3.00	3.00
-0.30765E 03	0.17562E 03	-0.	0.	0.36186E 03	-0.78857E 03	0.	3.20	3.20
-0.14713E 03	0.14753E 03	-0.	0.	0.74931E 03	-0.9948E 03	0.	3.40	3.40
-0.77093E 02	0.12037E 03	-0.	0.	0.12147E 03	-0.12500E 03	0.	3.60	3.60
-0.42719E 02	0.99791E 02	-0.	0.	0.69630E 02	-0.72190E 02	0.	3.80	3.80
-0.36593E 02	0.10489E 03	-0.	0.	0.75464E 02	-0.75327E 02	0.	4.00	4.00
-0.28654E 02	0.97696E 02	-0.	0.	0.66330E 02	-0.54114E 02	0.	4.20	4.20
-0.18068E 02	0.92149E 02	-0.	0.	0.56188E 02	-0.40895E 02	0.	4.40	4.40
-0.14351E 02	0.90074E 02	-0.	0.	0.60193E 02	-0.36419E 02	0.	4.60	4.60
-0.16647E 02	0.97260E 02	-0.	0.	0.63883E 02	-0.31775E 02	0.	4.80	4.80
-0.27643E 02	0.91513E 02	0.	0.	0.78791E 02	-0.43611E 02	0.	5.00	5.00
-0.25071E 02	0.13272E 03	0.	0.	0.91740E 02	-0.64714E 02	0.	5.20	5.20
-0.19545E 02	0.10576E 03	0.	0.	0.80204E 02	-0.62693E 02	0.	5.40	5.40
-0.75212E 01	0.10037E 03	0.	0.	0.59344E 02	-0.42063E 02	0.	5.60	5.60
0.66895E 01	0.96343E 02	0.	0.	0.44511E 02	-0.28072E 02	0.	5.80	5.80
0.13315E 02	0.90197E 02	0.	0.	0.43372E 02	-0.64114E 01	0.	6.00	6.00
0.22692E 02	0.81946E 02	0.	0.	0.50717E 02	0.20237E 02	0.	6.20	6.20
0.15875E 02	0.79206E 02	0.	0.	0.91212E 02	0.23229E 02	0.	6.40	6.40
0.36394E 02	0.81607E 02	0.	0.	0.13361E 03	-0.53413E 01	0.	6.60	6.60
0.30529E 02	0.99761E 02	0.	0.	0.21070E 03	-0.88313E 02	0.	6.80	6.80
0.18646E 02	0.12787E 03	0.	0.	0.27469E 03	-0.10517E 03	0.	7.00	7.00
0.91079E 01	0.10879E 03	0.	0.	0.26109E 03	-0.32103E 03	0.	7.20	7.20
0.35545E 02	0.18764E 03	0.	0.	0.11822E 03	-0.24719E 03	0.	7.40	7.40
0.12706E 03	0.14217E 03	0.	0.	-0.28963E 02	-0.89220E 02	0.	7.60	7.60
0.21066E 03	0.12724E 03	0.	0.	-0.46359E 02	-0.67292E 02	0.	7.80	7.80
0.26111E 03	0.10531E 03	0.	0.	-0.36050E 02	-0.50980E 02	0.	8.00	8.00
0.27796E 03	-0.43840E 02	0.	0.	-0.27412E 02	-0.62139E 01	0.	8.20	8.20
0.16322E 03	-0.18190E 03	0.	0.	-0.73498E 01	0.1019E 02	0.	8.40	8.40
0.17081E 03	-0.16079E 03	0.	0.	0.10356E 03	-0.80226E 02	0.	8.60	8.60
0.15652E 03	-0.30552E 03	0.	0.	0.18476E 03	-0.51282E 03	0.	8.80	8.80
0.77064E 02	-0.14906E 03	0.	0.	0.99189E 02	-0.14872E 03	0.	9.00	9.00
-0.15523E 03	-0.64483E 02	-0.	-0.	-0.17337E 01	-0.56172E 02	0.	9.20	9.20
-0.13609E 03	-0.61606E 02	-0.	-0.	-0.14985E 03	-0.32338E 02	0.	9.40	9.40
-0.12397E 03	-0.17514E 02	-0.	-0.	-0.11405E 03	-0.86721E 01	0.	9.60	9.60
-0.10642E 03	-0.12854E 02	-0.	-0.	-0.11162E 03	-0.43823E 01	0.	9.80	9.80
-0.10274E 03	0.19187E 00	-0.	0.	-0.10645E 03	0.67812E 01	0.	10.00	10.00
-0.90733E 02	0.10013E 02	-0.	0.	-0.90321E 02	0.15096E 02	0.	10.20	10.20
-0.79206E 02	0.19234E 02	-0.	0.	-0.76547E 02	0.18737E 02	0.	10.40	10.40
-0.47176E 02	0.26273E 02	-0.	0.	-0.61714E 02	0.20239E 02	0.	10.60	10.60
-0.56527E 02	0.30371E 02	-0.	0.	-0.49927E 02	0.19664E 02	0.	10.80	10.80
-0.49594E 02	0.34214E 02	-0.	0.	-0.43301E 02	0.17600E 02	0.	11.00	11.00
-0.42517E 02	0.34845E 02	-0.	0.	-0.38045E 02	0.17100E 02	0.	11.20	11.20
-0.41292E 02	0.35470E 02	-0.	0.	-0.37344E 02	0.16343E 02	0.	11.40	11.40
-0.40094E 02	0.36091E 02	-0.	0.	-0.36737E 02	0.15936E 02	0.	11.60	11.60
-0.38806E 02	0.36641E 02	-0.	0.	-0.36202E 02	0.12366E 02	0.	11.80	11.80
-0.37865E 02	0.42549E 02	-0.	0.	-0.33077E 02	0.37744E 01	0.	12.00	12.00
-0.19730E 02	0.31171E 02	-0.	0.	-0.42222E 02	0.27371E 02	0.	12.20	12.20
-0.83171E 00	0.27662E 02	0.	0.	-0.68096E 02	0.41783E 02	0.	12.40	12.40
-0.11336E 02	0.28719E 02	-0.	0.	-0.15081E 02	0.27306E 02	0.	12.60	12.60
-0.74852E 01	0.13633E 02	0.	0.	-0.15266E 02	0.34631E 02	0.	12.80	12.80
-0.78935E 01	0.18373E 02	-0.	0.	0.17289E 02	0.13144E 02	0.	13.00	13.00
-0.28534E 01	0.12817E 02	-0.	0.	0.20329E 02	0.434131-00	0.	13.20	13.20
0.11437E 02	0.	0.	0.	0.16091E 02	0.	0.	13.40	13.40

Table XVII -- Continued

IPS/IPS SINUSOIDAL GUST

GROSS WEIGHT: 190,590 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

BODY BALANCE STATION: 540 SEGMENT NUMBER 17

INTEGRATED STRESS						PSEUDO
REAL	IMAGINARY					
-0.33429E 01	-0.27740E 02	0.	0.	0.	0.	0.30
-0.44444E 02	-0.14055E 02	0.	0.	0.	0.	0.30
-0.53940E 02	-0.53280E 00	0.	-0.	0.	-0.	0.30
-0.55810E 02	0.81572E 01	0.	-0.	0.	-0.	0.30
-0.53027E 02	0.16442E 02	0.	-0.	0.	-0.	0.30
-0.47271E 02	0.21007E 02	0.	-0.	0.	-0.	0.30
-0.42415E 02	0.24020E 02	0.	-0.	0.	-0.	0.30
-0.38631E 02	0.24390E 02	0.	-0.	0.	-0.	0.30
-0.35713E 02	0.28630E 02	0.	-0.	0.	-0.	0.30
-0.33419E 02	0.33825E 02	0.	-0.	0.	-0.	1.00
-0.30272E 02	0.39486E 02	0.	-0.	0.	-0.	1.00
-0.28553E 02	0.42912E 02	0.	-0.	0.	-0.	1.00
-0.27780E 02	0.46530E 02	0.	-0.	0.	-0.	1.00
-0.26877E 02	0.48684E 02	0.	-0.	0.	-0.	1.00
-0.26249E 02	0.51125E 02	0.	-0.	0.	-0.	1.00
-0.25505E 02	0.53078E 02	0.	-0.	0.	-0.	1.00
-0.23189E 02	0.64941E 02	0.	-0.	0.	-0.	1.00
-0.18988E 02	0.74557E 02	0.	-0.	0.	-0.	1.00
-0.10357E 02	0.55150E 02	0.	-0.	0.	-0.	1.00
-0.62920E 02	0.29499E 01	-0.	0.	-0.	0.	1.00
0.41847E 02	-0.91740E 00	-0.	0.	-0.	0.	1.00
0.15135E 02	0.38670E 01	-0.	-0.	-0.	-0.	1.00
0.30924E 01	0.93878E 01	-0.	-0.	-0.	-0.	1.00
-0.30149E 01	0.15383E 02	-0.	-0.	-0.	-0.	1.00
-0.47536E 01	0.16948E 02	-0.	-0.	-0.	-0.	1.00
-0.40723E 01	0.20127E 02	-0.	-0.	-0.	-0.	1.00
-0.51403E 01	0.22744E 02	-0.	-0.	-0.	-0.	1.00
-0.37822E 01	0.22987E 02	-0.	-0.	-0.	-0.	1.00
-0.27654E 01	0.25472E 02	-0.	-0.	-0.	-0.	1.00
0.12123E 01	0.19804E 02	-0.	-0.	-0.	-0.	1.00
0.51186E 01	0.12524E 02	-0.	-0.	-0.	-0.	1.00
0.28127E 01	0.11013E 02	-0.	-0.	-0.	-0.	1.00
-0.31574E 01	0.14212E 02	-0.	-0.	-0.	-0.	1.00
-0.94759E 01	0.17010E 02	0.	-0.	0.	-0.	1.00
-0.12002E 02	0.22618E 02	0.	-0.	0.	-0.	1.00
-0.14216E 02	0.34825E 02	0.	-0.	0.	-0.	1.00
-0.29109E 02	0.44964E 02	0.	-0.	0.	-0.	1.00
-0.35952E 02	0.70123E 02	0.	-0.	0.	-0.	1.00
-0.43184E 02	0.11789E 03	0.	-0.	0.	-0.	1.00
-0.84501E 02	0.17108E 03	0.	-0.	0.	-0.	1.00
-0.83635E 02	0.25455E 03	0.	-0.	0.	-0.	1.00
-0.84898E 01	0.23261E 03	-0.	-0.	-0.	-0.	1.00
0.10481E 03	0.17010E 03	-0.	-0.	-0.	-0.	1.00
0.19786E 03	0.15581E 03	-0.	-0.	-0.	-0.	1.00
0.23654E 03	0.13112E 03	-0.	-0.	-0.	-0.	1.00
0.28479E 03	-0.98427E 02	-0.	0.	-0.	0.	1.00
0.42353E 03	-0.32151E 03	-0.	0.	-0.	0.	1.00
0.20886E 02	-0.13205E 03	-0.	0.	-0.	0.	1.00
-0.11455E 03	0.27881E 02	0.	-0.	0.	-0.	1.00
-0.33891E 02	-0.33063E 01	0.	0.	0.	0.	1.00
0.21205E 02	-0.18475E 02	-0.	0.	-0.	0.	1.00
0.12121E 02	-0.20259E 02	-0.	0.	-0.	0.	1.00
0.74143E 01	-0.19495E 02	-0.	0.	-0.	0.	1.00
0.15380E 01	-0.19216E 02	-0.	0.	-0.	0.	1.00
-0.11189E 00	-0.14967E 02	-0.	0.	-0.	0.	1.00
-0.32138E 01	-0.14000E 02	-0.	0.	-0.	0.	1.00
-0.48444E 01	-0.97526E 01	0.	0.	0.	0.	1.00
-0.81363E 01	-0.45393E 01	0.	0.	0.	0.	1.00
-0.92912E 01	-0.47969E 01	0.	0.	0.	0.	1.00
-0.92211E 01	0.57970E 01	0.	-0.	0.	-0.	1.00
0.78214E 01	0.69646E 01	0.	-0.	0.	-0.	1.00
-0.73685E 01	0.81897E 01	0.	-0.	0.	-0.	1.00
-0.68297E 01	0.94789E 01	0.	-0.	0.	-0.	1.00
-0.61914E 01	0.16150E 02	0.	-0.	0.	-0.	1.00
-0.14724E 01	0.29093E 02	-0.	-0.	-0.	-0.	1.00
0.20643E 02	-0.98008E 01	-0.	0.	-0.	0.	1.00
0.78494E 02	-0.42938E 02	-0.	0.	-0.	0.	1.00
-0.18047E 02	-0.22341E 02	0.	0.	0.	0.	1.00
-0.49644E 02	0.13420E 02	0.	-0.	0.	-0.	1.00
0.55404E 01	0.11442E 01	-0.	-0.	-0.	-0.	1.00
0.36034E 01	-0.13286E 01	-0.	-0.	-0.	-0.	1.00
0.17133E 01	0.	-0.	0.	-0.	0.	10.00

Table XVII -- Concluded

(PSI/PPS SINUSOIDAL GUST)

GROSS WEIGHT: 190,590 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

BODY BALANCE STATION: 820 SEGMENT NUMBER: 1

TWO-DIMENSIONAL AXIAL SYSTEM						FREQUENCY CPS
		REAL	IMAGINARY			
0.	0.	0.10020E 02	0.10349E 03	0.	0.	0.20
0.	0.	0.14919E 03	0.64263E 02	0.	0.	0.30
0.	0.	0.19794E 03	0.65361E 01	0.	0.	0.40
0.	-0.	0.26835E 03	-0.27207E 02	0.	-0.	0.50
0.	-0.	0.20088E 03	-0.61645E 02	0.	-0.	0.60
0.	-0.	0.18263E 02	-0.82745E 02	0.	-0.	0.70
0.	-0.	0.16635E 03	-0.90404E 02	0.	-0.	0.80
0.	-0.	0.15325E 03	-0.11204E 03	0.	-0.	0.90
0.	-0.	0.14264E 03	-0.12577E 03	0.	-0.	1.00
0.	-0.	0.13303E 03	-0.15879E 03	0.	-0.	1.10
0.	-0.	0.11933E 03	-0.19178E 03	0.	-0.	1.20
0.	-0.	0.10724E 03	-0.21139E 03	0.	-0.	1.30
0.	-0.	0.10022E 03	-0.23156E 03	0.	-0.	1.40
0.	-0.	0.92130E 02	-0.24334E 03	0.	-0.	1.50
0.	-0.	0.86847E 02	-0.25640E 03	0.	-0.	1.60
0.	-0.	0.80352E 02	-0.26760E 03	0.	-0.	1.70
0.	-0.	0.61926E 02	-0.32649E 03	0.	-0.	1.80
0.	-0.	0.30443E 02	-0.37122E 03	0.	-0.	1.90
-0.	-0.	-0.26123E 02	-0.18998E 03	-0.	-0.	2.00
-0.	0.	-0.40201E 03	0.67341E 02	-0.	0.	2.10
-0.	0.	-0.23712E 03	0.47185E 02	-0.	0.	2.20
-0.	0.	-0.03642E 02	1.16329E 02	-0.	0.	2.30
-0.	-0.	-0.25459E 02	-0.21511E 02	-0.	-0.	2.40
-0.	-0.	-0.12175E 01	-0.54631E 02	-0.	-0.	2.50
-0.	-0.	-0.28741E 01	-0.61124E 02	-0.	-0.	2.60
-0.	-0.	-0.21505E 01	-0.78169E 02	-0.	-0.	2.70
-0.	-0.	-0.30228E 01	-0.88525E 02	-0.	-0.	2.80
-0.	-0.	-0.11997E 02	-0.91937E 02	-0.	-0.	2.90
-0.	-0.	-0.17435E 02	-0.93544E 02	-0.	-0.	3.00
-0.	-0.	-0.35945E 02	-0.76598E 02	-0.	-0.	3.10
-0.	-0.	-0.54243E 02	-0.46995E 02	-0.	-0.	3.20
-0.	-0.	-0.43224E 02	-0.44653E 02	-0.	-0.	3.30
-0.	-0.	-0.19055E 02	-0.63860E 02	-0.	-0.	3.40
0.	-0.	0.82100E 00	-0.78791E 02	0.	-0.	3.50
0.	-0.	0.51077E 01	-0.10512E 03	0.	-0.	3.60
0.	-0.	0.44562E 01	-0.15824E 03	0.	-0.	3.70
-0.	-0.	-0.13093E 02	-0.18990E 03	-0.	-0.	3.80
-0.	-0.	-0.27044E 02	-0.23365E 03	-0.	-0.	3.90
-0.	-0.	-0.43217E 02	-0.27969E 03	-0.	-0.	4.00
-0.	-0.	-0.58646E 02	-0.32070E 03	-0.	-0.	4.10
-0.	-0.	-0.76737E 02	-0.36766E 03	-0.	-0.	4.20
-0.	-0.	-0.16294E 03	-0.39898E 03	-0.	-0.	4.30
-0.	-0.	-0.26033E 03	-0.40773E 03	-0.	-0.	4.40
-0.	-0.	-0.40035E 03	-0.39481E 03	-0.	-0.	4.50
-0.	-0.	-0.62889E 03	-0.34068E 03	-0.	-0.	4.60
-0.	0.	-0.79791E 03	0.31623E 03	-0.	0.	4.70
-0.	0.	-0.12327E 04	0.97089E 03	-0.	0.	4.80
0.	0.	-0.70839E 02	0.42332E 03	-0.	0.	4.90
0.	0.	0.29261E 03	0.56792E 02	0.	0.	5.00
0.	0.	0.17317E 03	0.93933E 02	0.	0.	5.10
0.	0.	0.26537E 02	0.91176E 02	0.	0.	5.20
0.	0.	0.51053E 02	0.81306E 02	0.	0.	5.30
0.	0.	0.59673E 02	0.63799E 02	0.	0.	5.40
0.	0.	0.67753E 02	0.59135E 02	0.	0.	5.50
0.	0.	0.69029E 02	0.43090E 02	0.	0.	5.60
0.	0.	0.71725E 02	0.27133E 02	0.	0.	5.70
0.	0.	0.72029E 02	0.73240E 01	0.	0.	5.80
0.	-0.	0.69962E 02	-0.12331E 02	0.	-0.	5.90
0.	-0.	0.63984E 02	-0.27050E 02	0.	-0.	6.00
0.	-0.	0.57747E 02	-0.44053E 02	0.	-0.	6.10
0.	-0.	0.47970E 02	-0.47223E 02	0.	-0.	6.20
0.	-0.	0.49792E 02	-0.50481E 02	0.	-0.	6.30
0.	-0.	0.43417E 02	-0.37399E 02	0.	-0.	6.40
0.	-0.	0.40814E 02	-0.76352E 02	0.	-0.	6.50
0.	-0.	0.25167E 02	-0.98879E 02	0.	-0.	6.60
-0.	-0.	-0.32324E 02	-0.11754E 02	-0.	-0.	6.70
-0.	-0.	-0.15911E 03	0.57432E 02	-0.	-0.	6.80
0.	0.	0.24374E 02	0.77446E 01	0.	0.	6.90
0.	0.	0.23203E 02	0.30191E 01	0.	0.	7.00
0.	-0.	0.21905E 02	-0.11644E 02	0.	-0.	7.10
0.	-0.	0.11166E 02	-0.12938E 02	0.	-0.	7.20
-0.	0.	-0.15885E 01	0.	-0.	0.	7.30

Table XVIII Stress Frequency Response Functions (Analysis Condition 4)

(PSI/PS SINUSOIDAL GUST)

GROSS WEIGHT: 107,260 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMISPAN: 27 SEGMENT NUMBER 10

INCREMENTAL SHEAR STRESS			INCREMENTAL AXIAL STRESS			FREQUENCY CPS
REAL	IMAGINARY		REAL	IMAGINARY		
-0.14009F 01	-0.63291F 01		0.20823F 02	0.92277E 02	-0.	0.10
-0.65263F 01	-0.51535E 01		0.13478E 03	0.76787E 02	-0.	0.30
-0.11744E 02	-0.30347E 01		0.16484E 03	0.46235E 02	-0.	0.36
-0.12059E 02	-0.12354E 01		0.19414E 03	0.68100E 02	-0.	0.44
-0.13316E 02	0.12674E 01		0.20816E 03	-0.23857E 02	-0.	0.50
-0.12970E 02	0.29754F 01		0.21810E 03	-0.63495E 02	-0.	0.56
-0.11846E 02	0.39670F 01		0.21280F 03	-0.95232F 02	-0.	0.70
-0.10773E 02	0.47656E 01		0.20411E 03	-0.12265E 03	-0.	0.80
-0.87836F 01	0.39136E 01		0.19329E 03	-0.14809E 03	-0.	0.90
-0.70962E 01	0.98525E 00		0.18149E 03	-0.19880E 03	-0.	1.00
-0.37917E 01	-0.38845E 01		0.15867E 03	-0.24329E 03	-0.	1.20
-0.16272E 01	-0.71564E 01		0.14071E 03	-0.26699E 03	-0.	1.36
-0.89664F 00	-0.16716E 02		0.13148E 03	-0.29022E 03	-0.	1.40
-0.50019F 00	-0.12462E 02		0.12222E 03	-0.30337E 03	-0.	1.45
-0.41798F 00	-0.15305E 02		0.11677E 03	-0.31776F 03	-0.	1.47
-0.45036E 00	-0.21291E 02		0.11056E 03	-0.35100E 03	-0.	1.50
-0.10325E 01	-0.29201E 02		0.96919E 02	-0.39283F 03	-0.	1.55
-0.27852E 01	-0.39750E 02		0.72441E 02	-0.44331E 03	-0.	1.60
-0.67936E 01	-0.86952E 02		0.37728E 02	-0.62785E 03	-0.	1.65
-0.70520E 02	-0.12126E 02		-0.91112E 03	-0.22489E 03	-0.	1.80
-0.17930E 03	0.99954F 02		-0.75802E 03	0.21080F 03	-0.	1.90
-0.12136E 03	0.10849E 03		-0.42991E 03	0.18239F 03	-0.	2.00
-0.61741E 02	0.10733E 03		-0.18373E 03	0.18529E 02	-0.	2.10
-0.31533E 02	0.97112E 02		-0.86224E 02	0.68987E 02	-0.	2.20
-0.10873E 02	0.91744E 02		-0.60643E 02	0.38785E 02	-0.	2.30
-0.61693E 01	0.90334F 02		-0.53906E 02	0.64240E 01	0.	2.35
-0.27896E 01	0.94603E 02		-0.41216E 02	-0.90399E 01	0.	2.40
-0.81701E 00	0.89766E 02		-0.57793E 02	-0.64895E 02	0.	2.45
-0.15629E 00	0.88577E 02		-0.62866E 02	-0.74242E 02	0.	2.44
0.79417E 00	0.89357E 02		-0.83621F 02	-0.14570F 02	0.	2.47
0.27300F 00	0.94704E 02		-0.11070E 03	0.27374E 02	0.	2.50
0.11002F 01	0.10006E 03		-0.11641E 03	0.46524E 02	0.	2.54
0.55924F 01	0.10473E 03		-0.85736E 02	0.31185F 02	0.	2.58
0.17748E 02	0.10759E 03		-0.50965E 02	0.15485F 02	0.	2.65
0.25488F 02	0.11429E 03		-0.42208E 02	-0.94437E 01	0.	2.70
0.41494E 02	0.13628E 03		-0.40590F 02	-0.45448E 02	0.	2.80
0.91227E 02	0.15240F 03		-0.63471E 02	-0.59627E 02	0.	3.00
0.11776E 03	0.16825E 03		-0.87237E 02	-0.70048E 02	0.	3.10
0.22355E 03	0.16555E 03		-0.12744E 03	-0.69334E 02	0.	3.20
0.31666E 03	0.14692E 03		-0.16742E 03	-0.61455E 02	0.	3.26
0.39747E 03	0.19024E 02		-0.19307E 03	-0.10730E 02	0.	3.29
0.58719F 03	-0.35587E 03		-0.26939E 03	0.12374E 03	-0.	3.25
0.68269F 03	-0.49585F 03		-0.29604F 03	0.14049E 03	-0.	3.40
-0.11172E 03	-0.35981E 03		-0.25656E 02	0.89418E 02	-0.	3.52
-0.17035E 03	-0.26391E 03		-0.19929E 02	0.55206F 02	-0.	3.56
-0.19163E 03	-0.12547E 03		-0.30093E 02	0.14090E 02	-0.	3.60
-0.16011E 03	-0.30587E 02		-0.76811E 02	0.36549E 02	-0.	3.70
-0.16771E 03	-0.32449F 02		-0.17132E 03	0.21034E 03	-0.	3.85
-0.12707E 02	-0.38240E 02		-0.17042E 03	0.18621F 03	-0.	4.00
-0.79137E 02	0.38644E 02		-0.26585E 02	0.24654E 03	-0.	4.20
-0.14266E 02	-0.47359E 01		0.11097E 08	0.97173E 02	-0.	4.50
0.10168F 01	-0.11172F 02		0.17518F 03	0.53636E 02	-0.	4.70
-0.56334E 01	-0.12461E 02		0.15928E 03	0.14974E 02	-0.	4.80
-0.13532E 02	-0.11997E 02		0.13202E 03	0.63307E 01	-0.	4.96
-0.16704E 02	-0.64890E 02		0.12577F 03	-0.90252E 01	-0.	5.00
-0.17864E 02	-0.63966E 01		0.10643F 03	-0.21038F 02	-0.	5.15
-0.19182E 02	-0.25278E 01		0.90391E 02	-0.31479E 02	-0.	5.30
-0.19747E 02	0.19244E 01		0.73102E 02	-0.59047E 02	-0.	5.40
-0.19048E 02	0.32590F 01		0.57948F 02	-0.42897E 02	-0.	5.70
-0.18111E 02	0.53549F 01		0.44171F 02	-0.45991E 02	-0.	5.85
-0.16842E 02	0.56892F 01		0.39484E 02	-0.46324E 02	-0.	6.00
-0.16499E 02	0.60161E 01		0.36868E 02	-0.46722F 02	-0.	6.03
-0.16349E 02	0.63356F 01		0.35264E 02	-0.47895E 02	-0.	6.06
-0.14093E 02	0.76840F 01		0.33674E 02	-0.48490E 02	-0.	6.08
-0.14443E 02	0.96035E 01		0.26630E 02	-0.49888E 02	-0.	6.20
-0.12552F 02	0.11162F 02		0.15195E 02	-0.30242E 02	-0.	6.40
-0.97964E 01	0.12479E 02		0.12624E 01	-0.45224E 02	-0.	6.60
-0.19770E 01	-0.11645E 01		-0.27068E 02	0.16805E 02	-0.	7.00
0.87964F 01	0.80864E 01		-0.60862E 02	-0.21723E 02	-0.	7.40
-0.10658E 02	0.19488F 02		-0.27075E 02	0.11314E 02	-0.	8.20
-0.91973E 00	0.51755E 01		0.27298E 02	-0.79705E 01	-0.	9.00
0.36570F 01	0.		0.81592E 01	0.	0.	10.00

Table XVIII --- Continued

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 107,260 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMI SPAN: 27 SEGMENT NUMBER 14

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY CPS
REAL	IMAGINARY	REAL	IMAGINARY			
0.12154E 01	0.14733E 02	0.18894E 02	0.83739E 02	-0.	-0.	0.10
0.20092E 02	0.11914E 02	0.12231E 03	0.64687E 02	-0.	-0.	0.20
0.24976E 02	0.77627E 01	0.14959E 03	0.41947E 02	-0.	-0.	0.30
0.30411E 02	0.25904E 01	0.17418E 03	0.16432E 02	-0.	-0.	0.40
0.33044E 02	-0.45746E 01	0.18890E 03	-0.23464E 02	-0.	0.	0.50
0.34907E 02	-0.10980E 02	0.19611E 03	-0.37620E 02	-0.	0.	0.60
0.36037E 02	-0.36726E 02	0.19311E 03	-0.86421E 02	-0.	0.	0.70
0.36344E 02	-0.22119E 02	0.19523E 03	-0.11130E 03	-0.	0.	0.80
0.36774E 02	-0.27656E 02	0.17541E 03	-0.13439E 03	-0.	0.	0.90
0.37417E 02	-0.40723E 02	0.16488E 03	-0.18040E 03	-0.	0.	1.00
0.38002E 02	-0.54472E 02	0.14399E 03	-0.22078E 03	-0.	0.	1.20
0.38767E 02	-0.62400E 02	0.12769E 03	-0.24228E 03	-0.	0.	1.30
0.39167E 02	-0.70586E 02	0.11352E 03	-0.26337E 03	-0.	0.	1.40
0.39744E 02	-0.79355E 02	0.11091E 03	-0.27330E 03	-0.	0.	1.50
0.40376E 02	-0.88673E 02	0.10594E 03	-0.28034E 03	-0.	0.	1.60
0.41052E 02	-0.93330E 02	0.10033E 03	-0.31819E 03	-0.	0.	1.70
0.41767E 02	-0.10949E 03	0.96136E 02	-0.35585E 03	-0.	0.	1.80
0.42524E 02	-0.13038E 03	0.65738E 02	-0.40229E 03	-0.	0.	1.90
0.43324E 02	-0.21595E 03	0.46237E 02	-0.56913E 03	-0.	-0.	2.00
0.44167E 02	-0.62800E 02	0.28234E 03	-0.20403E 03	-0.	0.	2.10
0.45044E 02	0.13837E 03	-0.48788E 03	0.19136E 03	-0.	0.	2.20
0.45967E 02	0.16772E 03	-0.39013E 03	0.16551E 03	-0.	0.	2.30
0.46924E 02	0.12347E 03	-0.16673E 03	0.10009E 03	-0.	0.	2.40
0.47914E 02	0.10401E 03	-0.80061E 02	0.44455E 02	-0.	0.	2.50
0.48934E 02	0.97219E 02	-0.54451E 02	0.28844E 02	-0.	0.	2.60
0.49984E 02	0.90713E 02	-0.48918E 02	0.58322E 01	0.	0.	2.70
0.51064E 02	0.86673E 02	-0.46477E 02	-0.82035E 01	0.	0.	2.80
0.52174E 02	0.95090E 02	-0.52445E 02	-0.13401E 02	0.	0.	2.90
0.53314E 02	0.92524E 02	-0.57050E 02	-0.21999E 02	0.	0.	3.00
0.54484E 02	0.86141E 02	-0.74554E 02	-0.13222E 02	0.	0.	3.10
0.55684E 02	0.10278E 02	-0.10046E 03	0.25022E 02	0.	0.	3.20
0.56914E 02	-0.11386E 03	-0.10564E 03	0.42221E 02	0.	0.	3.30
0.58164E 02	0.11635E 03	-0.77803E 02	0.28300E 02	0.	0.	3.40
0.59434E 02	0.11632E 03	-0.48742E 02	0.14052E 02	0.	0.	3.50
0.60724E 02	0.11492E 03	-0.38303E 02	-0.85730E 01	0.	0.	3.60
0.62034E 02	0.13715E 03	-0.36894E 02	-0.41261E 02	0.	0.	3.70
0.63364E 02	0.15308E 03	-0.47598E 02	-0.54110E 02	0.	0.	3.80
0.64714E 02	0.16928E 03	-0.76165E 02	-0.63567E 02	0.	0.	3.90
0.66084E 02	0.18548E 03	-0.11565E 03	-0.62919E 02	0.	0.	4.00
0.67474E 02	0.14398E 03	-0.15211E 03	-0.55749E 02	0.	0.	4.10
0.68884E 02	-0.23713E 01	-0.18065E 03	-0.97554E 01	0.	0.	4.20
0.70314E 02	-0.43766E 03	-0.24447E 03	0.11412E 03	0.	-0.	4.30
0.71764E 02	-0.60281E 03	-0.26865E 03	0.12767E 03	0.	-0.	4.40
0.73234E 02	-0.44775E 03	-0.23287E 02	0.81145E 02	-0.	-0.	4.50
0.74724E 02	-0.33797E 03	-0.18085E 02	0.50098E 02	-0.	-0.	4.60
0.76234E 02	-0.17621E 03	-0.27309E 02	0.12786E 02	-0.	-0.	4.70
0.77764E 02	-0.35099E 02	-0.69704E 02	0.33185E 02	-0.	-0.	4.80
0.79314E 02	0.87443E 02	-0.15547E 03	0.19089E 03	-0.	-0.	4.90
0.80884E 02	0.46440E 02	-0.15465E 03	0.10899E 03	-0.	-0.	5.00
0.82474E 02	0.10313E 03	-0.24126E 02	0.22373E 03	-0.	0.	5.10
0.84084E 02	0.24391E 02	0.10071E 03	0.88183E 02	-0.	-0.	5.20
0.85714E 02	0.64374E 01	0.15897E 03	0.48692E 02	-0.	-0.	5.30
0.87364E 02	-0.38341E 01	0.14454E 03	0.13588E 02	-0.	-0.	5.40
0.89034E 02	-0.74086E 01	0.11981E 03	0.73399E 01	-0.	-0.	5.50
0.90724E 02	-0.10495E 02	0.11413E 03	-0.81901E 01	-0.	-0.	5.60
0.92434E 02	-0.11594E 02	0.76769E 02	-0.19110E 02	-0.	-0.	5.70
0.94164E 02	-0.11678E 02	0.82028E 02	-0.28708E 02	-0.	0.	5.80
0.95914E 02	-0.11136E 02	0.66338E 02	-0.35433E 02	-0.	0.	5.90
0.97684E 02	-0.10566E 02	0.52586E 02	-0.38928E 02	-0.	0.	6.00
0.99474E 02	-0.98800E 01	0.43714E 02	-0.41644E 02	-0.	0.	6.10
1.01284E 02	-0.97567E 01	0.36923E 02	-0.42038E 02	-0.	0.	6.20
1.03114E 02	-0.96323E 01	0.33637E 02	-0.42399E 02	-0.	0.	6.30
1.04964E 02	-0.95072E 01	0.32003E 02	-0.42738E 02	-0.	0.	6.40
1.06834E 02	-0.89390E 01	0.17559E 02	-0.44003E 02	-0.	0.	6.50
1.08724E 02	-0.76078E 01	0.74167E 02	-0.45272E 02	-0.	0.	6.60
1.10634E 02	-0.70707E 01	0.13789E 02	-0.45611E 02	-0.	0.	6.70
1.12564E 02	-0.40812E 01	0.79806E 01	-0.41042E 02	-0.	0.	6.80
1.14514E 02	0.17795E 02	-0.24563E 02	0.11679E 02	0.	-0.	6.90
1.16484E 02	0.38593E 01	-0.55230E 02	-0.19715E 02	0.	0.	7.00
1.18474E 02	0.17214E 02	-0.26570E 02	-0.10449E 02	-0.	0.	7.10
1.20484E 02	0.53895E 01	0.24772E 02	-0.72330E 01	-0.	0.	7.20
1.22514E 02	0.	0.74043E 01	0.	0.	0.	7.30
1.24564E 02	0.					7.40
1.26634E 02	0.					7.50
1.28724E 02	0.					7.60
1.30834E 02	0.					7.70
1.32964E 02	0.					7.80
1.35114E 02	0.					7.90
1.37284E 02	0.					8.00
1.39474E 02	0.					8.10
1.41684E 02	0.					8.20
1.43914E 02	0.					8.30
1.46164E 02	0.					8.40
1.48434E 02	0.					8.50
1.50724E 02	0.					8.60
1.53034E 02	0.					8.70
1.55364E 02	0.					8.80
1.57714E 02	0.					8.90
1.60084E 02	0.					9.00
1.62474E 02	0.					9.10
1.64884E 02	0.					9.20
1.67314E 02	0.					9.30
1.69764E 02	0.					9.40
1.72234E 02	0.					9.50
1.74724E 02	0.					9.60
1.77234E 02	0.					9.70
1.79764E 02	0.					9.80
1.82314E 02	0.					9.90
1.84884E 02	0.					10.00

Table XVIII - - - Continued

(PSI/PS SINUSOIDAL GUST)

GROSS WEIGHT: 107,200 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMISPAN: 40.06 SEGMENT NUMBER 8

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY CPS
REAL	IMAGINARY	REAL	IMAGINARY			
0.1224EF 01	0.15237E 02	0.10733E 02	0.05506E 02	-0.	-0.	0.10
0.12164E 02	0.12847E 02	0.12404E 03	0.71353F 02	-0.	-0.	0.20
0.12065E 02	0.08364E 01	0.15210E 03	0.43023E 02	-0.	-0.	0.30
0.11850E 02	0.35452E 01	0.17907E 03	0.16731E 02	-0.	0.	0.40
0.11620E 02	-0.36015E 01	0.19334E 03	-0.24724E 02	-0.	0.	0.50
0.11407E 02	-0.99239E 01	0.20138E 03	-0.60604E 02	-0.	0.	0.60
0.11259E 02	-0.15544E 02	0.19875E 03	-0.01180E 02	-0.	0.	0.70
0.11054E 02	-0.20791E 02	0.19087E 03	-0.11787E 03	-0.	0.	0.80
0.10900E 02	-0.26179E 02	0.18075E 03	-0.14280E 03	-0.	-0.	0.90
0.10741E 02	-0.30992E 02	0.16964E 03	-0.19264E 03	0.	-0.	1.00
0.10584E 02	-0.52937E 02	0.14685E 03	-0.23612E 03	0.	-0.	1.20
0.10410E 02	-0.60446E 02	0.12840E 03	-0.25912E 03	0.	-0.	1.40
0.10260E 02	-0.68564E 02	0.11891E 03	-0.28160E 03	0.	-0.	1.60
0.10084E 02	-0.73794E 02	0.10916E 03	-0.29420E 03	0.	-0.	1.80
0.9904E 02	-0.78467E 02	0.10349E 03	-0.30812E 03	0.	-0.	2.00
0.9762E 02	-0.91114E 02	0.97051E 02	-0.34006E 03	0.	-0.	2.20
0.9605E 02	-0.10713E 03	0.80722E 02	-0.37921E 03	0.	-0.	2.40
0.9454E 02	-0.12783E 03	0.67973E 02	-0.42770E 03	0.	-0.	2.60
0.9292E 01	-0.21331E 03	0.22455E 02	-0.50474E 03	0.	-0.	2.80
0.11916E 03	-0.66747E 02	-0.31780E 03	-0.19642E 03	-0.	-0.	3.00
0.11520E 03	0.12853E 03	-0.73430E 03	0.20950E 03	-0.	0.	3.20
0.11973E 03	0.13109E 03	-0.47695E 03	0.17217E 03	-0.	0.	3.40
0.11429E 02	0.10402E 03	-0.17294E 03	0.93420E 02	-0.	0.	3.60
0.11494E 02	0.87584E 02	-0.86645E 02	0.33463E 02	-0.	0.	3.80
0.11310E 02	0.42781E 02	-0.82339E 02	0.38539E 02	-0.	0.	4.00
0.11269E 02	0.86601E 02	-0.73914E 02	0.16811E 02	-0.	0.	4.20
0.11350E 02	0.41525E 02	-0.61390E 02	0.17927E 01	-0.	0.	4.40
0.11267E 02	0.79322E 02	-0.64107E 02	-0.38890E 01	-0.	0.	4.60
0.11246E 02	0.75010E 02	-0.67521E 02	-0.13713E 02	-0.	0.	4.80
0.11181E 02	0.75846E 02	-0.83081E 02	-0.78881E 01	0.	0.	5.00
0.11043E 02	0.87415E 02	-0.10400E 03	0.22993E 02	0.	0.	5.20
0.11212E 02	0.44909E 02	-0.10764E 03	0.34907E 02	0.	0.	5.40
0.11022E 02	0.43134E 02	-0.83224E 02	0.17944E 02	0.	0.	5.60
0.10723E 01	0.89753E 02	-0.57544E 02	0.26547E 01	0.	0.	5.80
0.10442E 02	0.94195E 02	-0.52796E 02	-0.21773E 02	0.	0.	6.00
0.10541E 02	0.75843E 02	-0.57137E 02	-0.58140E 02	0.	0.	6.20
0.10407E 02	0.71332E 02	-0.94227E 02	-0.72633E 02	0.	0.	6.40
0.10291E 02	0.64806E 02	-0.13009E 03	-0.81549E 02	0.	0.	6.60
0.10055E 02	0.59269E 02	-0.19191E 03	-0.75181E 02	0.	0.	6.80
0.10020E 02	0.58005E 02	-0.25578E 03	-0.58809E 02	0.	0.	7.00
0.10517E 02	0.45447E 02	-0.30558E 03	0.32615E 02	0.	0.	7.20
0.10221E 02	0.84559E 02	-0.41881E 03	0.26983E 03	0.	0.	7.40
0.10062E 02	0.15331E 03	-0.45628E 03	0.30134E 03	0.	0.	7.60
0.11998E 03	0.14343E 03	0.27545E 02	0.21384E 03	0.	0.	7.80
0.11960E 03	0.13297E 03	0.46533E 02	0.15909E 03	0.	0.	8.00
0.11767E 03	0.10217E 03	0.40112E 02	0.88332E 02	0.	0.	8.20
0.11683E 03	-0.26122E 02	-0.14594E 01	0.78183E 02	-0.	-0.	8.40
0.11904E 03	-0.42747E 03	-0.68716E 02	0.14944E 03	0.	-0.	8.60
0.11969E 03	-0.27404E 03	-0.74697E 02	0.14556E 03	0.	-0.	8.80
0.11905E 03	-0.14089E 03	-0.53741E 02	0.28552E 03	-0.	-0.	9.00
0.11593E 03	-0.69695E 02	0.13803E 03	0.94646E 02	-0.	-0.	9.20
0.11283E 03	-0.45430E 02	0.20924E 03	0.44711E 02	-0.	-0.	9.40
0.11195E 03	-0.20335E 02	0.18492E 03	0.43142E 01	-0.	-0.	9.60
0.11042E 03	-0.15550E 02	0.14735E 03	-0.20169E 01	-0.	-0.	9.80
0.10905E 03	-0.22293E 01	0.13910E 03	-0.17220E 02	-0.	-0.	10.00
0.10831E 02	0.77575E 01	0.11464E 03	-0.26173E 02	-0.	0.	10.20
0.10825E 02	0.17069E 02	0.94959E 02	-0.32366E 02	-0.	0.	10.40
0.10672E 02	0.23903E 02	0.75524E 02	-0.35334E 02	-0.	0.	10.60
0.10638E 02	0.27797E 02	0.60245E 02	-0.36186E 02	-0.	0.	10.80
0.10495E 02	0.31044E 02	0.51425E 02	-0.36313E 02	-0.	0.	11.00
0.10302E 02	0.31535E 02	0.43566E 02	-0.36271E 02	-0.	0.	11.20
0.10190E 02	0.32008E 02	0.42344E 02	-0.36211E 02	-0.	0.	11.40
0.10088E 02	0.32464E 02	0.41159E 02	-0.36136E 02	-0.	0.	11.60
0.10003E 02	0.34316E 02	0.40007E 02	-0.35614E 02	-0.	0.	11.80
0.10003E 02	0.36734E 02	0.35234E 02	-0.34201E 02	-0.	0.	12.00
0.10271E 02	0.38432E 02	0.28719E 02	-0.32245E 02	-0.	0.	12.20
0.10133E 02	0.38197E 02	0.23836E 02	-0.28438E 02	-0.	0.	12.40
0.10077E 02	0.87316E 01	0.20843E 02	-0.46723E 02	0.	0.	12.60
0.10146E 02	0.25986E 02	0.28386E 02	-0.26223E 02	0.	0.	12.80
0.10550E 01	0.13445E 02	-0.26153E 02	-0.94046E 01	0.	0.	13.00
0.10670E 01	0.13784E 02	-0.12173E 02	-0.26803E 01	-0.	0.	13.20
0.10337E 01	0.	-0.11984E 02	0.	0.	0.	13.40

Table XVIII --- Continued

(PSI/PS SINUSOIDAL GUST)

GROSS WEIGHT: 107,200 LB CUTOFF FREQUENCY: 16 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

PERCENT SEMISPAN 42.00 SEGMENT NUMBER 107

INCREMENTAL SHEAR STRESS				INCREMENTAL ANGLE STRESS				FREQUENCY CPS
REAL	IMAGINARY			REAL	IMAGINARY			
0.13910E 01	0.15610E 02	-0.	-0.	-0.16006E 02	-0.73110E 02	-0.	-0.	0.18
0.22333E 02	0.13134E 02	-0.	-0.	-0.10499E 03	-0.60968E 02	-0.	-0.	0.30
0.27393E 02	0.41938E 01	-0.	-0.	-0.13003E 03	-0.36760E 02	-0.	-0.	0.36
0.26147E 02	0.36163E 01	-0.	-0.	-0.15368E 03	-0.14295E 02	-0.	-0.	0.44
0.36332E 02	-0.36025E 01	-0.	-0.	-0.16519E 03	0.21125E 02	-0.	-0.	0.50
0.36184E 02	-0.49102E 01	-0.	-0.	-0.17206E 03	0.51781E 02	-0.	-0.	0.60
0.36715E 02	-0.15441E 02	-0.	-0.	-0.16982E 03	0.77914E 02	-0.	-0.	0.70
0.36012E 02	-0.20532E 02	-0.	-0.	-0.16308E 03	0.19071E 03	-0.	-0.	0.80
0.36057E 02	-0.25690E 02	-0.	-0.	-0.15443E 03	0.12292E 03	-0.	-0.	0.90
0.36215E 02	-0.37867E 02	-0.	-0.	-0.14454E 03	0.16459E 03	-0.	-0.	1.00
0.37497E 02	-0.50627E 02	-0.	-0.	-0.12547E 03	0.20175E 03	-0.	-0.	1.20
0.31849E 02	-0.54066E 02	-0.	-0.	-0.10971E 03	0.22141E 03	-0.	-0.	1.34
0.11049E 02	-0.45743E 02	-0.	-0.	-0.10151E 03	0.24061E 03	-0.	-0.	1.40
0.20497E 02	-0.70205E 02	-0.	-0.	-0.93268E 02	0.25144E 03	-0.	-0.	1.45
0.26181E 02	-0.75181E 02	-0.	-0.	-0.87925E 02	0.26327E 03	-0.	-0.	1.47
0.29115E 02	-0.47026E 02	-0.	-0.	-0.87925E 02	0.29096E 03	-0.	-0.	1.50
0.29557E 02	-0.10216E 03	-0.	-0.	-0.49142E 02	0.32401E 03	-0.	-0.	1.55
0.10777E 02	-0.12173E 03	-0.	-0.	-0.49534E 02	0.36544E 03	-0.	-0.	1.60
0.10435E 02	-0.70311E 03	-0.	-0.	-0.19614E 02	0.59817E 03	-0.	-0.	1.65
-0.10774E 03	-0.66239E 02	-0.	-0.	0.27154E 03	0.14783E 03	-0.	-0.	1.80
-0.20465E 03	0.11892E 03	-0.	-0.	0.42741E 03	-0.17952E 03	-0.	-0.	1.90
-0.19461E 03	0.12154E 03	-0.	-0.	0.34771E 03	-0.14711E 03	-0.	-0.	2.00
-0.04974E 02	0.10001E 03	-0.	-0.	0.14777E 03	-0.81537E 02	-0.	-0.	2.10
-0.41812E 02	0.90956E 02	-0.	-0.	0.74033E 02	-0.30301E 02	-0.	-0.	2.20
-0.31377E 02	0.95104E 02	-0.	-0.	0.70353E 02	-0.32929E 02	-0.	-0.	2.30
-0.36954E 02	0.79199E 02	-0.	-0.	0.63154E 02	-0.14364E 02	-0.	-0.	2.35
-0.36344E 02	0.74031E 02	-0.	-0.	0.52645E 02	-0.15518E 01	-0.	-0.	2.40
-0.11457E 02	0.71923E 02	-0.	-0.	0.54771E 02	0.33235E 01	-0.	-0.	2.45
-0.11459E 02	0.67705E 02	-0.	-0.	0.57692E 02	0.11717E 02	-0.	-0.	2.47
-0.14939E 02	0.69145E 02	-0.	-0.	0.70987E 02	0.67394E 01	-0.	-0.	2.49
-0.21174E 02	0.91777E 02	-0.	-0.	0.48858E 02	-0.19647E 02	-0.	-0.	2.50
-0.22101E 02	0.49917E 02	-0.	-0.	0.91949E 02	-0.29826E 02	-0.	-0.	2.54
-0.10775E 02	0.88094E 02	-0.	-0.	0.71109E 02	-0.12349E 02	-0.	-0.	2.58
0.62964E 01	0.84725E 02	-0.	-0.	0.49168E 02	-0.22693E 01	-0.	-0.	2.65
0.14211E 02	0.79171E 02	-0.	-0.	0.45111E 02	0.18603E 02	-0.	-0.	2.70
0.27300E 02	0.70749E 02	-0.	-0.	0.48820E 02	0.49694E 02	-0.	-0.	2.80
0.49662E 02	0.66091E 02	-0.	-0.	0.80511E 02	0.62060E 02	-0.	-0.	3.00
0.71849E 02	0.59249E 02	-0.	-0.	0.11115E 03	0.69674E 02	-0.	-0.	3.10
0.49734E 02	0.53608E 02	-0.	-0.	0.16398E 03	0.64237E 02	-0.	-0.	3.20
0.49400E 02	0.49412E 02	-0.	-0.	0.21812E 03	0.50300E 02	-0.	-0.	3.26
0.49693E 02	0.48180E 02	-0.	-0.	0.26110E 03	-0.27868E 02	-0.	-0.	3.29
0.41554E 02	0.74480E 02	-0.	-0.	0.35785E 03	-0.23057E 03	-0.	-0.	3.35
0.14190E 02	0.14516E 03	-0.	-0.	0.39986E 03	-0.25747E 03	-0.	-0.	3.40
0.11379E 03	0.13642E 03	-0.	-0.	-0.25535E 02	-0.18442E 03	-0.	-0.	3.52
0.14289E 03	0.12434E 03	-0.	-0.	-0.39759E 02	-0.13593E 03	-0.	-0.	3.56
0.14923E 03	0.96191E 02	-0.	-0.	-0.34273E 02	-0.75474E 02	-0.	-0.	3.60
0.23764E 03	0.29681E 02	-0.	-0.	0.12469E 01	-0.66492E 02	-0.	-0.	3.70
0.37139E 03	-0.40507E 03	-0.	-0.	0.58713E 02	-0.12769E 03	-0.	-0.	3.85
0.27910E 03	-0.26215E 03	-0.	-0.	0.63823E 02	-0.12694E 03	-0.	-0.	4.00
-0.57702E 02	-0.14019E 03	-0.	-0.	0.45918E 02	-0.24396E 03	-0.	-0.	4.20
-0.11744E 03	-0.46960E 02	-0.	-0.	-0.11794E 03	-0.40968E 02	-0.	-0.	4.50
-0.12760E 03	0.42861E 02	-0.	-0.	-0.17883E 03	-0.38203E 02	-0.	-0.	4.70
-0.11342E 03	0.18460E 02	-0.	-0.	-0.15900E 03	-0.36462E 01	-0.	-0.	4.80
-0.10751E 03	-0.13874E 02	-0.	-0.	-0.12590E 03	0.17233E 01	-0.	-0.	4.96
-0.09729E 03	-0.12624E 01	-0.	-0.	-0.11885E 03	0.14729E 02	-0.	-0.	5.00
-0.08763E 03	0.80714E 01	-0.	-0.	-0.97954E 02	0.22363E 02	-0.	-0.	5.15
-0.76367E 02	0.16596E 02	-0.	-0.	-0.81136E 02	0.27655E 02	-0.	-0.	5.30
-0.46624E 02	0.22607E 02	-0.	-0.	-0.46514E 02	0.30190E 02	-0.	-0.	5.35
-0.46819E 02	0.26168E 02	-0.	-0.	-0.31475E 02	0.30919E 02	-0.	-0.	5.70
-0.46649E 02	0.29001E 02	-0.	-0.	-0.43039E 02	0.31027E 02	-0.	-0.	5.85
-0.42754E 02	0.27627E 02	-0.	-0.	-0.37224E 02	0.30991E 02	-0.	-0.	6.00
-0.41232E 02	0.24837E 02	-0.	-0.	-0.36180E 02	0.30940E 02	-0.	-0.	6.05
-0.40520E 02	0.30231E 02	-0.	-0.	-0.35167E 02	0.30876E 02	-0.	-0.	6.06
-0.39759E 02	0.31874E 02	-0.	-0.	-0.34183E 02	0.30439E 02	-0.	-0.	6.08
-0.38623E 02	0.33889E 02	-0.	-0.	-0.30105E 02	0.29222E 02	-0.	-0.	6.20
-0.27810E 02	0.35319E 02	-0.	-0.	-0.24539E 02	0.27551E 02	-0.	-0.	6.40
-0.20728E 02	0.35277E 02	-0.	-0.	-0.20366E 02	0.24299E 02	-0.	-0.	6.60
-0.46825E 01	0.14660E 02	-0.	-0.	-0.17809E 02	0.39494E 02	-0.	-0.	7.00
0.13160E 02	0.25496E 02	-0.	-0.	-0.24254E 02	0.27456E 02	-0.	-0.	7.40
0.35217E 01	0.15497E 02	-0.	-0.	0.22354E 02	0.80355E 01	-0.	-0.	8.20
0.84546E 00	0.13001E 02	-0.	-0.	0.19401E 02	0.22902E 01	-0.	-0.	9.00
0.11146E 02	0.	-0.	-0.	0.19241E 02	0.	-0.	-0.	10.00

Table XVIII --- Continued

(PSI/PS SINUSOIDAL GUST)

GROSS WEIGHT: 107,260 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

BODY BALANCE STATION: 540 SEGMENT NUMBER 17

INCIDENCEAL SHEAR STRESS						FREQUENCY	
REAL	IMAGINARY					CPS	
-0.18744E-01	-0.46730E 00	0.	0.	0.	0.	0.10	
-0.10561E 01	-0.41030E-00	0.	0.	0.	0.	0.20	
-0.12422E 01	-0.15013E-00	0.	0.	0.	0.	0.30	
-0.13875E 01	-0.11359E-01	0.	-0.	0.	-0.	0.40	
-0.14238E 01	-0.15005E-00	0.	-0.	0.	-0.	0.50	
-0.13790E 01	-0.55578E 00	0.	-0.	0.	-0.	0.60	
-0.12731E 01	-0.69612E 00	0.	-0.	0.	-0.	0.70	
-0.11541E 01	-0.79702E 00	0.	-0.	0.	-0.	0.80	
-0.10431E 01	-0.86107E 00	0.	-0.	0.	-0.	0.90	
-0.94720E 00	-0.97962E 00	0.	-0.	0.	-0.	1.00	
-0.91049E 00	-0.10819E 01	0.	-0.	0.	-0.	1.20	
-0.74640E 00	-0.11396E 01	0.	-0.	0.	-0.	1.30	
-0.72374E 00	-0.11922E 01	0.	-0.	0.	-0.	1.40	
-0.70505E 00	-0.12722E 01	0.	-0.	0.	-0.	1.50	
-0.68512E 00	-0.12657E 01	0.	-0.	0.	-0.	1.60	
-0.66452E 00	-0.13594E 01	0.	-0.	0.	-0.	1.70	
-0.64883E 00	-0.14713E 01	0.	-0.	0.	-0.	1.80	
-0.62177E 00	-0.16709E 01	0.	-0.	0.	-0.	1.90	
-0.56095E 00	-0.22900E 01	0.	-0.	0.	-0.	2.00	
-0.21512E-00	-0.15409E 01	-0.	-0.	-0.	-0.	2.10	
-0.15780E 01	-0.25628E-00	-0.	-0.	-0.	-0.	2.20	
-0.95722E 00	-0.20042E-00	-0.	-0.	-0.	-0.	2.30	
-0.34549E-00	-0.35724E-00	-0.	-0.	-0.	-0.	2.40	
-0.45745E-01	-0.45122E 00	-0.	-0.	-0.	-0.	2.50	
-0.52779E-01	-0.59644E 00	-0.	-0.	-0.	-0.	2.60	
-0.70477E-01	-0.68965E 00	-0.	-0.	-0.	-0.	2.70	
-0.92722E-01	-0.75802E 00	0.	-0.	0.	-0.	2.80	
-0.69746E-01	-0.78576E 00	-0.	-0.	-0.	-0.	2.90	
-0.47820E-01	-0.83524E 00	-0.	-0.	-0.	-0.	3.00	
-0.50322E-01	-0.79130E 00	-0.	-0.	-0.	-0.	3.10	
-0.19337E-00	-0.55898E 00	-0.	-0.	-0.	-0.	3.20	
-0.24186E-00	-0.42460E-00	-0.	-0.	-0.	-0.	3.30	
-0.77424E-01	-0.44483E-00	-0.	-0.	-0.	-0.	3.40	
-0.15676E-00	-0.43391E 00	0.	-0.	0.	-0.	3.50	
-0.25236E-00	-0.65558E 00	0.	-0.	0.	-0.	3.60	
-0.37805E-00	-0.83749E 00	0.	-0.	0.	-0.	3.70	
-0.68174E 00	-0.89972E 00	0.	-0.	0.	-0.	3.80	
-0.10167E 01	-0.99664E 00	0.	-0.	0.	-0.	3.90	
-0.17704E 01	-0.12775E 01	0.	-0.	0.	-0.	4.00	
-0.27196E 01	-0.15811E 01	0.	-0.	0.	-0.	4.10	
-0.35625E 01	-0.34340E 01	0.	-0.	0.	-0.	4.20	
-0.56787E 01	-0.84924E 01	0.	-0.	0.	-0.	4.30	
-0.84618E 01	-0.10881E 02	0.	-0.	0.	-0.	4.40	
-0.50602E 01	-0.92636E 01	-0.	-0.	-0.	-0.	4.50	
-0.84136E 01	-0.81376E 01	-0.	-0.	-0.	-0.	4.60	
-0.72951E 01	-0.62744E 01	-0.	-0.	-0.	-0.	4.70	
-0.56272E 01	-0.12151E 01	-0.	-0.	-0.	-0.	4.80	
-0.15589E 02	-0.16700E 02	-0.	-0.	-0.	-0.	4.90	
-0.17309E 02	-0.34417E 01	-0.	-0.	-0.	-0.	5.00	
-0.88812E 01	-0.54045E 01	0.	-0.	0.	-0.	5.10	
-0.40395E-00	-0.19367E-00	0.	-0.	0.	-0.	5.20	
-0.25759E 01	-0.82772E 00	-0.	-0.	-0.	-0.	5.30	
-0.19428E 01	-0.13196E 01	-0.	-0.	-0.	-0.	5.40	
-0.10720E 01	-0.13468E 01	-0.	-0.	-0.	-0.	5.50	
-0.90182E 00	-0.13141E 01	-0.	-0.	-0.	-0.	5.60	
-0.46213E-00	-0.11905E 01	-0.	-0.	-0.	-0.	5.70	
-0.17549E-00	-0.10052E 01	-0.	-0.	-0.	-0.	5.80	
-0.40644E-01	-0.81876E 00	-0.	-0.	-0.	-0.	5.90	
-0.15725E-00	-0.69857E 00	0.	-0.	0.	-0.	6.00	
-0.19800E-00	-0.58294E 00	0.	-0.	0.	-0.	6.10	
-0.21509E-00	-0.56423E 00	0.	-0.	0.	-0.	6.20	
-0.21537E-00	-0.54588E 00	0.	-0.	0.	-0.	6.30	
-0.21497E-00	-0.52788E 00	0.	-0.	0.	-0.	6.40	
-0.21350E-00	-0.49135E-00	0.	-0.	0.	-0.	6.50	
-0.20107E-00	-0.44159E-00	0.	-0.	0.	-0.	6.60	
-0.15221E-00	-0.25352E-00	0.	-0.	0.	-0.	6.70	
-0.45764E-01	-0.18955E-00	0.	-0.	0.	-0.	6.80	
-0.29068E-00	-0.12628E 01	-0.	-0.	-0.	-0.	6.90	
-0.10457E 01	-0.81816E 00	-0.	-0.	-0.	-0.	7.00	
-0.26911E 01	-0.93776E 00	0.	-0.	-0.	-0.	7.10	
-0.88068E 00	-0.46075E-01	-0.	-0.	-0.	-0.	7.20	
-0.45390E-00	0.	-0.	-0.	-0.	-0.	7.30	

Table XVIII --- Concluded

(PSI/PS SINUSOIDAL GUST)

GROSS WEIGHT: 107,260 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.85

BODY BALANCE STATION: 820 SEGMENT NUMBER 1

INCREMENTAL AXIAL STRESS						FREQUENCY CPS
		REAL	IMAGINARY			
0.	0.	0.12938E 02	0.44903E 02	0.	0.	0.10
0.	0.	0.76771E 02	0.32895E 02	0.	0.	0.20
0.	0.	0.92098E 02	0.18922E 02	0.	0.	0.30
0.	0.	0.10575E 03	0.33799E 01	0.	0.	0.40
0.	-0.	0.11117E 01	-0.19423E 02	0.	-0.	0.50
0.	-0.	0.11209E 03	-0.37300E 02	0.	-0.	0.60
0.	-0.	0.10771E 03	-0.31609E 02	0.	-0.	0.70
0.	-0.	0.10133E 03	-0.62954E 02	0.	-0.	0.80
0.	-0.	0.94472E 02	-0.72893E 02	0.	-0.	0.90
0.	-0.	0.88327E 02	-0.91744E 02	0.	-0.	1.00
0.	-0.	0.77334E 02	-0.10794E 03	0.	-0.	1.20
0.	-0.	0.70429E 02	-0.11643E 03	0.	-0.	1.30
0.	-0.	0.47086E 02	-0.12473E 03	0.	-0.	1.40
0.	-0.	0.43840E 02	-0.12938E 03	0.	-0.	1.50
0.	-0.	0.62094E 02	-0.13445E 03	0.	-0.	1.60
0.	-0.	0.49919E 02	-0.14607E 03	0.	-0.	1.70
0.	-0.	0.54752E 02	-0.14024E 03	0.	-0.	1.80
0.	-0.	0.47449E 02	-0.17771E 03	0.	-0.	1.90
0.	-0.	0.42999E 02	-0.24062E 03	0.	-0.	2.00
0.	-0.	-0.44622E 02	-0.11736E 03	0.	-0.	2.10
0.	0.	-0.27665E 03	-0.14138E 02	0.	0.	2.20
0.	0.	-0.11427E 03	-0.23438E 01	0.	0.	2.30
0.	0.	-0.37579E 02	-0.27002E 02	0.	0.	2.40
0.	0.	-0.92994E 01	-0.33439E 02	0.	0.	2.50
0.	0.	-0.81249E 01	-0.38227E 02	0.	0.	2.60
0.	0.	-0.73869E 01	-0.70743E 02	0.	0.	2.70
0.	0.	-0.73994E 01	-0.79980E 02	0.	0.	2.80
0.	0.	-0.11945E 02	-0.82118E 02	0.	0.	2.90
0.	0.	-0.15127E 02	-0.87229E 02	0.	0.	3.00
0.	0.	-0.27321E 02	-0.82019E 02	0.	0.	3.10
0.	0.	-0.43295E 02	-0.59380E 02	0.	0.	3.20
0.	0.	-0.47462E 02	-0.49909E 02	0.	0.	3.30
0.	0.	-0.31698E 02	-0.60359E 02	0.	0.	3.40
0.	0.	-0.14643E 02	-0.71248E 02	0.	0.	3.50
0.	0.	-0.11443E 02	-0.90096E 02	0.	0.	3.60
0.	0.	-0.13919E 02	-0.12441E 03	0.	0.	3.70
0.	0.	-0.15313E 02	-0.14187E 03	0.	0.	3.80
0.	0.	-0.53425E 02	-0.13914E 03	0.	0.	3.90
0.	0.	-0.79631E 02	-0.16034E 03	0.	0.	4.00
0.	0.	-0.10079E 03	-0.17203E 03	0.	0.	4.10
0.	0.	-0.11498E 03	-0.17178E 03	0.	0.	4.20
0.	0.	-0.14258E 03	-0.13931E 03	0.	0.	4.30
0.	0.	-0.18755E 03	-0.19683E 03	0.	0.	4.40
0.	0.	-0.18467E 03	-0.21296E 03	0.	0.	4.50
0.	0.	-0.21710E 03	-0.22387E 03	0.	0.	4.60
0.	0.	-0.25812E 03	-0.22324E 03	0.	0.	4.70
0.	0.	-0.40206E 03	-0.21689E 02	0.	0.	4.80
0.	0.	-0.75924E 03	-0.71701E 03	0.	0.	4.90
0.	0.	-0.63481E 03	-0.55178E 03	0.	0.	5.00
0.	0.	0.47443E 03	-0.18347E 03	0.	0.	5.10
0.	0.	0.77330E 02	0.33971E 03	0.	0.	5.20
0.	0.	0.47036E 02	0.49872E 02	0.	0.	5.30
0.	0.	0.18377E 02	0.76346E 02	0.	0.	5.40
0.	0.	0.17586E 02	0.74433E 02	0.	0.	5.50
0.	0.	0.74010E 02	0.43590E 02	0.	0.	5.60
0.	0.	0.39459E 02	0.49948E 02	0.	0.	5.70
0.	0.	0.47425E 02	0.33203E 02	0.	0.	5.80
0.	0.	0.40469E 02	0.18212E 02	0.	0.	5.90
0.	0.	0.48919E 02	0.89888E 01	0.	0.	6.00
0.	0.	0.45827E 02	0.49444E 00	0.	0.	6.10
0.	0.	0.41718E 02	-0.84580E 00	0.	0.	6.20
0.	0.	0.40437E 02	-0.21520E 01	0.	0.	6.30
0.	0.	0.39515E 02	-0.34247E 01	0.	0.	6.40
0.	0.	0.38549E 02	-0.87509E 01	0.	0.	6.50
0.	0.	0.33948E 02	-0.18183E 02	0.	0.	6.60
0.	0.	0.74447E 02	-0.22000E 02	0.	0.	6.70
0.	0.	0.13714E 02	-0.24904E 02	0.	0.	6.80
0.	0.	-0.71693E 02	0.37364E 02	0.	0.	6.90
0.	0.	-0.77494E 02	0.12184E 02	0.	0.	7.00
0.	0.	0.45470E 02	-0.17787E 02	0.	0.	7.10
0.	0.	-0.15472E 02	-0.10826E 02	0.	0.	7.20
0.	0.	-0.14218E 02	0.	0.	0.	7.30
0.	0.			0.	0.	10.00

Table XIX Stress Frequency Response Functions (Analysis Condition 5)

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.50

PERCENT SEMI SPAN: 27 SEGMENT NUMBER 10

INCREMENTAL BEND STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY CPS
REAL	IMAGINARY	REAL	IMAGINARY			
0.56628E 00	-0.67701E 00	-0.77131E 01	0.56303E 01	0.	-0.	0.10
0.36134E 02	0.91346E 01	0.31923E 03	-0.73260E 02	-0.	0.	0.30
0.22242E 02	-0.17774E 02	0.26271E 03	-0.10975E 03	-0.	0.	0.56
0.23379E 02	-0.14301E 02	0.21134E 03	-0.12588E 03	-0.	0.	0.84
0.20474E 02	-0.16322E 02	0.18712E 03	-0.14717E 03	-0.	0.	0.90
0.17670E 02	-0.14507E 02	0.16753E 03	-0.16944E 03	-0.	0.	0.60
0.15847E 02	-0.21278E 02	0.14454E 03	-0.19659E 03	-0.	0.	0.70
0.14474E 02	-0.24994E 02	0.12994E 03	-0.23148E 03	-0.	0.	0.80
0.13110E 02	-0.30514E 02	0.11527E 03	-0.28124E 03	-0.	0.	0.90
0.11540E 02	-0.35160E 02	0.95733E 02	-0.48798E 03	-0.	0.	1.00
0.27358E 01	-0.10740E 03	0.15277E 01	-0.87974E 03	0.	-0.	1.20
0.57650E 02	-0.67373E 02	-0.43971E 03	-0.48538E 03	0.	-0.	1.34
0.1-284E 03	0.74463E 02	-0.14143E 04	0.57092E 03	0.	-0.	1.40
0.1-108E 03	0.46057E 02	-0.11797E 04	0.71232E 03	-0.	-0.	1.45
0.10705E 04	0.47109E 02	-0.81032E 03	0.69744E 03	-0.	0.	1.47
0.73339E 02	0.74150E 02	-0.53794E 03	0.56075E 03	-0.	0.	1.50
0.31092E 02	0.41307E 02	-0.24173E 03	0.43993E 03	-0.	0.	1.55
0.17429E 02	0.41894E 02	-0.11333E 03	0.34272E 03	-0.	0.	1.60
0.79786E 01	0.36582E 02	-0.49315E 02	0.20540E 03	-0.	0.	1.65
0.57940E 02	0.31911E 02	0.25134E 02	0.15407E 03	0.	0.	1.80
0.1-025E 02	0.29268E 02	0.34051E 02	0.11825E 03	0.	0.	1.90
0.15544E 02	0.27914E 02	0.42074E 02	0.92340E 02	0.	0.	2.00
0.27746E 02	0.26517E 02	0.41811E 02	0.72640E 02	0.	0.	2.10
0.34408E 02	0.94275E 01	0.40474E 02	0.56396E 02	0.	0.	2.20
0.43549E 02	0.45630E 01	0.34447E 02	0.51100E 02	0.	0.	2.30
0.54134E 02	-0.43307E 01	0.27418E 02	0.42137E 02	0.	-0.	2.35
0.68606E 02	-0.19572E 02	0.17387E 02	0.60084E 02	-0.	-0.	2.40
0.76136E 02	-0.24579E 02	0.12239E 02	0.65774E 02	0.	-0.	2.45
0.76535E 02	-0.45843E 02	0.12265E 02	0.77513E 02	0.	-0.	2.44
0.62110E 02	-0.51147E 02	0.21597E 02	0.77895E 02	0.	-0.	2.47
0.57580E 02	-0.57243E 02	0.37914E 02	0.64424E 02	0.	-0.	2.50
0.40458E 02	-0.49034E 02	0.50817E 02	0.42722E 02	0.	-0.	2.54
0.24453E 02	-0.13867E 01	0.53041E 02	0.42978E 02	0.	-0.	2.58
0.26450E 02	-0.76594E 02	0.46435E 02	0.41469E 02	-0.	-0.	2.65
0.28343E 02	-0.19364E 02	0.47278E 02	0.34505E 02	-0.	-0.	2.70
0.63379E 02	0.43818E 01	0.50012E 02	0.23272E 02	-0.	0.	2.80
0.45423E 02	0.11793E 02	0.55563E 02	0.17957E 02	-0.	0.	3.00
0.36424E 02	0.17687E 02	0.53675E 02	0.19528E 02	-0.	0.	3.10
0.48366E 01	0.28034E 02	0.83036E 02	-0.28414E 02	-0.	0.	3.20
0.44307E 02	0.41799E 02	0.97795E 02	-0.40547E 02	-0.	0.	3.6
0.46513E 02	0.65518E 02	0.1130E 02	-0.79520E 02	-0.	0.	3.29
0.29018E 02	0.76584E 02	0.32755E 02	-0.55299E 02	-0.	0.	3.35
0.50423E 01	0.64771E 02	0.55093E 01	-0.22441E 02	-0.	0.	3.40
0.92511E 02	-0.13010E 02	0.15965E 01	-0.19227E 02	0.	-0.	3.52
0.87712E 02	-0.47044E 02	0.51747E 01	-0.17092E 02	0.	-0.	3.56
0.41373E 02	-0.26962E 02	0.74714E 01	-0.16233E 02	0.	-0.	3.60
0.75382E 01	-0.12014E 02	0.89119E 01	-0.16208E 02	-0.	-0.	3.70
0.46483E 01	-0.48194E 01	0.85799E 01	-0.17249E 02	-0.	-0.	3.85
0.66777E 01	-0.43381E 01	0.73474E 01	-0.19498E 02	-0.	-0.	4.00
0.61765E 01	0.44504E 01	0.35873E 01	-0.24546E 02	-0.	-0.	4.20
0.42944E 01	0.46577E 01	-0.66257E 01	-0.28632E 02	-0.	0.	4.50
0.26847E 01	0.45974E 01	-0.24147E 02	-0.26476E 02	0.	-0.	4.70
0.17187E 01	0.43015E 01	-0.43973E 02	0.47680E 02	0.	-0.	4.80
0.80054E 01	0.39381E 01	-0.77695E 02	0.74716E 02	0.	-0.	4.96
0.17928E 00	0.43676E 01	-0.49663E 02	0.47178E 02	0.	-0.	5.00
0.23373E 00	0.46820E 01	0.19753E 02	0.21278E 02	-0.	-0.	5.15
0.21562E 00	0.45639E 01	0.24317E 02	0.81841E 01	-0.	-0.	5.30
0.21844E 02	0.39001E 01	0.27363E 02	0.12734E 01	-0.	0.	5.40
0.41044E 01	0.28343E 01	0.27294E 02	-0.42829E 01	-0.	0.	5.70
0.62112E 01	-0.46477E 01	0.25274E 02	-0.23540E 02	-0.	0.	5.85
0.88098E 02	-0.40294E 01	0.30381E 02	-0.30782E 02	-0.	0.	6.00
0.83380E 01	0.44250E 01	0.27237E 02	-0.38291E 02	0.	0.	6.05
0.85880E 01	-0.10106E 02	0.27444E 02	-0.43221E 02	-0.	-0.	6.08
0.44491E 01	-0.29120E 01	0.12595E 02	-0.21261E 02	-0.	0.	6.20
0.47896E 01	0.17150E 01	-0.14454E 02	-0.42816E 01	0.	0.	6.20
0.17082E 01	0.20984E 01	-0.77317E 01	-0.38321E 01	0.	0.	6.40
0.48424E 02	0.15331E 01	-0.44504E 01	-0.24367E 01	0.	0.	6.60
0.14117E 01	0.74594E 00	-0.29232E 01	-0.14298E 01	0.	0.	7.00
0.18412E 01	-0.48085E 00	-0.26229E 01	0.37409E 01	-0.	-0.	7.40
0.14492E 01	-0.10970E 01	-0.70482E 01	0.83313E 00	-0.	-0.	8.20
0.97828E 00	-0.11866E 01	-0.10893E 01	0.80100E 00	0.	-0.	9.00
0.14308E 00	0.	-0.16779E 00	0.	-0.	0.	10.00

Table XIX --- Continued

(PSI/PS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.50

PERCENT SEMI SPAN: 27 SEGMENT NUMBER 14

EXPERIMENTAL MEASUREMENTS		EXPERIMENTAL ACTUAL STUDIES		FREQUENCY CPS
OFFAL	IMAGINARY	OFFAL	IMAGINARY	
-0.21413E 01	0.26386E -00	-0.49995E 01	0.51093E 01	0.10
0.10816E 01	-0.25679E 02	0.28954E 03	-0.56402E 02	0.30
0.48268E 02	-0.17185E 02	0.21941E 03	-0.99592E 02	0.50
0.70908E 02	-0.42091E 02	0.19234E 03	-0.11423E 03	0.60
0.62715E 02	-0.40514E 02	0.15981E 03	-0.13356E 03	0.70
0.53491E 02	-0.55296E 02	0.14692E 03	-0.19376E 03	0.80
0.48268E 02	-0.63688E 02	0.13124E 03	-0.17840E 03	0.90
0.51645E 02	-0.74619E 02	0.11792E 03	-0.21006E 03	1.00
0.59261E 02	-0.90572E 02	0.10463E 03	-0.25527E 03	1.20
0.51894E 02	-0.15325E 03	0.87763E 02	-0.44283E 03	1.40
0.57524E 01	-0.29304E 03	0.13854E 03	-0.79834E 03	1.60
-0.14641E 03	-0.17307E 03	-0.48777E 03	-0.53865E 03	1.80
-0.46096E 03	0.17790E 03	-0.12671E 04	0.51810E 03	2.00
-0.39513E 03	0.27946E 03	-0.13704E 04	0.64641E 03	2.20
-0.27504E 03	0.27927E 03	-0.73577E 03	0.63293E 03	2.40
-0.19493E 03	0.19750E 03	-0.48817E 03	0.53887E 03	2.60
-0.84974E 02	0.14983E 03	-0.21934E 03	0.39923E 03	2.80
-0.40127E 02	0.12761E 03	-0.10255E 03	0.32008E 03	3.00
-0.17641E 02	0.76512E 02	-0.44753E 02	0.19648E 03	3.20
0.10491E 02	0.40980E 02	0.18244E 02	0.13981E 03	3.40
0.18802E 02	0.50621E 02	0.30901E 02	0.10731E 03	3.60
0.25724E 02	0.43500E 02	0.54347E 02	0.63605E 02	3.80
0.33551E 02	0.37347E 02	0.37942E 02	0.65738E 02	4.00
0.44887E 02	0.15684E 02	0.35733E 02	0.51178E 02	4.20
0.66104E 02	0.92765E 01	0.31267E 02	0.46372E 02	4.40
0.61545E 02	-0.15101E 00	0.25244E 02	0.47313E 02	4.60
0.77014E 02	-0.15186E 02	0.15775E 02	0.54525E 02	4.80
0.83656E 02	-0.23420E 02	0.11106E 02	0.59689E 02	5.00
0.84084E 02	-0.38897E 02	0.11111E 02	0.70341E 02	5.20
0.77779E 02	-0.44857E 02	0.19539E 02	0.70688E 02	5.40
0.71623E 02	-0.56661E 02	0.34410E 02	0.59370E 02	5.60
0.79428E 02	-0.98629E 02	0.45115E 02	0.47844E 02	5.80
0.87114E 02	-0.16051E 01	0.48114E 02	0.39002E 02	6.00
-0.36814E 02	-0.88548E 02	0.42133E 02	0.37650E 02	6.20
-0.86278E 02	-0.24379E 02	0.42924E 02	0.31316E 02	6.40
-0.70064E 02	0.57482E 00	0.45385E 02	0.21118E 02	6.60
-0.50714E 02	0.54244E 01	0.50622E 02	0.16296E 02	6.80
-0.54192E 02	0.17634E 02	0.47794E 02	0.35871E 01	7.00
-0.73360E 02	0.50516E 02	0.75155E 02	-0.25789E 02	7.20
-0.44908E 02	0.89906E 02	0.88747E 02	-0.55036E 02	7.40
-0.92911E 02	0.13375E 03	0.80856E 02	-0.71709E 02	7.60
-0.32904E 02	0.12744E 03	0.79751E 02	-0.52183E 02	7.80
0.15367E 02	0.67727E 02	0.50821E 01	-0.20374E 02	8.00
0.13261E 01	-0.69254E 01	0.14483E 01	-0.16540E 02	8.20
0.12549E 01	-0.18261E 02	0.46543E 01	-0.15510E 02	8.40
0.81114E 02	-0.31244E 02	0.67401E 01	-0.14731E 02	8.60
0.26273E 02	-0.17925E 02	0.80673E 01	-0.14708E 02	8.80
0.86697E 01	-0.12647E 02	0.77850E 01	-0.15653E 02	9.00
0.32301E 01	-0.95900E 01	0.61954E 01	-0.17694E 02	9.20
-0.23906E 00	-0.10458E 02	0.32551E 01	-0.22311E 02	9.40
-0.54186E 01	-0.17122E 02	-0.60127E 01	-0.25983E 02	9.60
-0.15305E 02	-0.10692E 02	-0.21949E 02	-0.26026E 02	9.80
-0.26617E 02	0.32696E 02	-0.39932E 02	0.43269E 02	10.00
-0.44651E 02	0.48479E 02	-0.73537E 02	0.67803E 02	10.20
-0.78911E 02	0.32326E 02	-0.45068E 02	0.42813E 02	10.40
0.12220E 02	0.17012E 02	0.17025E 02	0.19309E 02	10.60
0.14449E 02	0.85862E 01	0.27067E 02	0.74269E 01	10.80
0.15103E 02	0.45885E 00	0.20294E 02	0.11554E 01	11.00
0.18419E 02	-0.13037E 02	0.22901E 02	-0.38866E 01	11.20
0.22611E 02	-0.18059E 02	0.27871E 02	-0.21362E 02	11.40
0.21011E 02	-0.23339E 02	0.25674E 02	-0.27934E 02	11.60
0.17123E 02	-0.26827E 02	0.20380E 02	-0.36749E 02	11.80
0.10137E 02	-0.11940E 02	0.11433E 02	-0.39222E 02	12.00
-0.81688E 01	-0.19674E 01	-0.13120E 02	-0.17294E 02	12.20
-0.37929E 01	-0.43838E 00	-0.70141E 01	-0.57002E 01	12.40
-0.92626E 00	-0.42851E 00	-0.41389E 01	-0.22108E 01	12.60
-0.54859E 00	-0.46407E 00	-0.24501E 01	-0.13882E 01	12.80
-0.49692E 00	-0.32562E 00	-0.23872E 01	0.33949E 01	13.00
0.37093E 00	-0.13061E 00	-0.18754E 01	0.75609E 00	13.20
0.41144E 00	-0.20479E 00	-0.49885E 00	0.72689E 00	13.40
0.69694E 00	0.	-0.19224E 00	0.	13.60

Table XIX --- Continued

(PSI/PS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.50

PERCENT SEMISPAN: 40.06 SEGMENT NUMBER: 8

TWO-DIMENSIONAL SPAN STRESS		TWO-DIMENSIONAL AXIAL STRESS				FREQUENCY CPS
REAL	IMAGINARY	REAL	IMAGINARY			
-0.14710E 01	0.52493E-01	-0.90166E 01	0.63507E 01	-0.	-0.	0.10
0.75289E 02	-0.14821E 02	0.10789E 03	-0.73690E 02	0.	-0.	0.20
0.17466E 02	-0.24492E 02	0.25355E 03	-0.10686E 03	0.	-0.	0.30
0.14262E 02	-0.27519E 02	0.20432E 03	-0.12303E 03	0.	-0.	0.40
0.10447E 02	-0.32356E 02	0.14074E 03	-0.14436E 03	0.	-0.	0.50
0.15507E 02	-0.37249E 02	0.15593E 03	-0.14532E 03	0.	-0.	0.60
0.12002E 02	-0.43614E 02	0.13857E 03	-0.19334E 03	0.	-0.	0.70
0.29147E 02	-0.51581E 02	0.12372E 03	-0.22799E 03	0.	-0.	0.80
0.26383E 02	-0.63547E 02	0.10861E 03	-0.27625E 03	0.	-0.	0.90
0.22855E 02	-0.11541E 03	0.89475E 02	-0.47702E 03	0.	-0.	1.00
0.27863E 01	-0.22054E 03	-0.48434E 01	-0.85297E 03	0.	-0.	1.20
-0.13533E 01	-0.12439E 03	-0.43793E 03	-0.45666E 03	-0.	-0.	1.50
-0.15500E 01	-0.14471E 03	-0.13978E 04	0.56884E 03	-0.	0.	1.60
-0.10922E 01	0.14439E 03	-0.11439E 04	0.70268E 03	-0.	0.	1.70
-0.21485E 01	0.14493E 03	-0.78439E 03	0.68524E 03	-0.	0.	1.80
-0.14569E 01	0.14319E 03	-0.52294E 03	0.54881E 03	-0.	0.	1.90
-0.17465E 02	0.12500E 03	-0.21513E 03	0.42975E 03	-0.	0.	2.00
-0.17408E 02	0.10401E 03	-0.11146E 03	0.34421E 03	-0.	0.	2.10
-0.14189E 02	0.69057E 02	-0.10834E 02	0.20069E 03	-0.	0.	2.20
0.17465E 01	0.57618E 02	0.11501E 02	0.15105E 03	0.	0.	2.30
0.15979E 02	0.49827E 02	0.25233E 02	0.11684E 03	0.	0.	2.40
0.22107E 02	0.44704E 02	0.24721E 02	0.92663E 02	0.	0.	2.50
0.28696E 02	0.40631E 02	0.27421E 02	1.74897E 02	0.	0.	2.60
0.17473E 02	0.33866E 02	0.19567E 02	0.80925E 02	0.	0.	2.70
0.10709E 02	0.29447E 02	0.10913E 01	0.79115E 02	0.	0.	2.80
0.10494E 02	0.17819E 02	0.13479E 02	0.76369E 02	0.	0.	2.90
0.75666E 02	0.29372E 01	0.44734E 01	0.82839E 02	0.	-0.	3.00
0.12113E 02	-0.54731E 01	0.15961E 01	0.87641E 02	0.	-0.	3.10
0.17487E 02	-0.21377E 02	0.14839E 01	0.97311E 02	0.	-0.	3.20
0.74838E 02	-0.26266E 02	0.81371E 01	0.98473E 02	0.	-0.	3.30
0.15044E 02	-0.30817E 02	0.18045E 02	0.95793E 02	0.	-0.	3.40
0.66533E 02	-0.45500E 02	0.21229E 02	0.10511E 03	0.	-0.	3.50
0.71118E 02	-0.92147E 02	0.19649E 02	0.12387E 03	0.	-0.	3.60
-0.10445E 01	-0.42823E 02	0.46269E 02	0.94439E 02	-0.	-0.	3.70
-0.18191E 02	0.14514E 01	0.37731E 02	0.65662E 02	-0.	-0.	3.80
-0.20628E 02	0.20335E 02	0.85771E 02	0.52252E 02	-0.	0.	3.90
0.16551E 02	0.21542E 02	0.10034E 03	0.47167E 02	0.	0.	4.00
0.42221E 02	0.34799E 01	0.12782E 03	0.14235E 02	0.	0.	4.10
0.91730E 02	-0.48302E 02	0.19547E 03	-0.82723E 02	0.	-0.	4.20
0.13273E 03	-0.12690E 03	0.24814E 03	-0.18378E 03	0.	-0.	4.30
0.12326E 03	-0.17949E 03	0.22672E 03	-0.24092E 03	0.	-0.	4.40
0.10842E 02	-0.14004E 03	0.47542E 02	-0.16023E 03	0.	-0.	4.50
-0.14359E 02	-0.57204E 02	-0.35619E 02	-0.57533E 02	-0.	-0.	4.60
-0.12658E 03	-0.61974E 01	-0.25153E 02	-0.55510E 02	-0.	-0.	4.70
-0.11277E 03	0.14321E 02	-0.14941E 02	-0.42328E 02	-0.	0.	4.80
-0.14540E 02	0.18529E 02	-0.22957E 02	-0.36603E 02	-0.	0.	4.90
-0.47076E 02	0.16591E 02	-0.22794E 02	-0.22059E 02	-0.	0.	5.00
-0.19987E 02	0.17699E 02	-0.18913E 02	-0.13689E 02	-0.	0.	5.10
-0.21466E 02	0.17841E 02	-0.15218E 02	-0.68018E 01	-0.	0.	5.20
-0.13956E 02	0.19200E 02	-0.11499E 02	0.79393E 00	-0.	0.	5.30
-0.46393E 01	0.19946E 02	-0.54252E 01	0.52423E 01	-0.	0.	5.40
0.17647E 01	0.14807E 02	0.29753E 01	0.55050E 01	0.	0.	5.50
0.11098E 02	-0.45013E 01	0.12072E 02	-0.25587E 02	0.	-0.	5.60
0.22996E 02	-0.12661E 02	0.28951E 02	-0.37370E 02	0.	-0.	5.70
0.14762E 02	0.47937E 01	0.15953E 02	-0.24338E 02	0.	-0.	5.80
-0.50277E 01	0.24339E 01	-0.14372E 02	-0.11730E 02	-0.	-0.	5.90
-0.50032E 01	0.53625E 01	-0.15733E 02	-0.47366E 01	-0.	0.	6.00
-0.27882E 01	0.61494E 01	-0.13354E 02	-0.11845E 01	-0.	0.	6.10
-0.11371E 01	0.64892E 01	-0.10765E 02	0.98607E-01	-0.	0.	6.20
-0.42599E 00	0.66119E 01	-0.47703E 01	-0.69476E 00	-0.	0.	6.30
-0.54117E 00	0.95252E 01	-0.68217E 01	-0.12824E 01	-0.	0.	6.40
-0.10430E-00	0.10466E 02	-0.69394E 01	-0.16571E 01	-0.	0.	6.50
0.86755E 00	0.11031E 02	-0.74163E 01	-0.20897E 01	-0.	0.	6.60
0.23749E 01	0.72579E 01	-0.15733E 01	0.15486E 01	-0.	0.	6.70
0.24255E 01	0.41138E 01	-0.4117E 01	0.39610E 01	0.	0.	6.80
0.61338E 01	0.27863E 01	-0.7257E 01	0.46345E 01	0.	0.	6.90
0.59680E 01	0.65931E 00	-0.52143E 01	0.48206E 01	0.	0.	7.00
0.57753E 01	-0.11220E 01	-0.75514E 01	0.42199E 01	0.	-0.	7.10
0.52070E 01	-0.34939E 01	0.14544E-00	0.19333E 01	0.	-0.	7.20
0.29862E 01	-0.39543E 01	0.21444E 01	-0.57253E 00	0.	-0.	7.30
0.24449E-00	-0.24655E 01	0.22519E 01	-0.23255E 01	-0.	-0.	7.40
-0.20721E 01	0.	0.11199E-00	0.	-0.	0.	7.50

Table XIX --- Continued

(PSI/PS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.50

PERCENT SEMISPAN: 40.06 SEGMENT NUMBER 107

INCIDENTAL HEAD STRESS			INCIDENTAL TAIL STRESS			FREQUENCY CPS
REAL	IMAGINARY		REAL	IMAGINARY		
-0.13669E 01	-0.10457E-01	-0.	0.68494E 01	-0.54262E 01	0.10	
0.47748E 02	-0.16107E 02	0.	-0.26303E 03	0.60407E 02	0.30	
0.44918E 02	-0.23292E 02	0.	-0.21692E 03	0.91302E 02	0.50	
0.44179E 02	-0.26619E 02	0.	-0.17569E 03	0.10512E 03	0.60	
0.49016E 02	-0.30630E 02	0.	-0.15443E 03	0.12335E 03	0.70	
0.31916E 02	-0.35198E 02	0.	-0.13323E 03	0.14228E 03	0.80	
0.40474E 02	-0.40968E 02	0.	-0.11849E 03	0.16519E 03	0.90	
0.27453E 02	-0.48627E 02	0.	-0.10571E 03	0.19446E 03	1.00	
0.25190E 02	-0.59009E 02	0.	-0.92801E 02	0.22477E 03	1.20	
0.27139E 02	-0.10885E 03	0.	-0.76450E 02	0.40754E 03	1.40	
0.31662E 01	-0.20801E 03	0.	0.58694E 01	0.72580E 03	1.60	
-0.12099E 03	-0.12243E 03	-0.	0.44138E 03	0.19010E 03	1.80	
-0.33618E 03	0.13614E 03	-0.	0.11900E 04	-0.48806E 03	2.00	
-0.29057E 03	0.17299E 03	-0.	0.98161E 03	-0.64037E 03	2.20	
-0.20303E 03	0.17299E 03	-0.	0.67243E 03	-0.54549E 03	2.40	
-0.13710E 03	0.14395E 03	-0.	0.44604E 03	-0.44892E 03	2.60	
-0.43540E 02	0.11695E 03	-0.	0.20095E 03	-0.36719E 03	2.80	
-0.30357E 02	0.97285E 02	-0.	0.95236E 02	-1.29611E 03	3.00	
-0.13170E 02	0.44655E 02	-0.	0.43410E 02	-0.17480E 03	3.20	
0.28775E 01	0.43674E 02	0.	-0.11623E 02	-0.12706E 03	3.40	
0.15609E 02	0.44227E 02	0.	-0.21602E 02	-0.99878E 02	3.60	
0.21497E 02	0.41279E 02	0.	-0.24711E 02	0.79004E 02	3.80	
0.27815E 02	0.37241E 02	0.	-0.23431E 02	-0.63994E 02	4.00	
0.36101E 02	0.30197E 02	0.	-0.16701E 02	-0.69099E 02	4.20	
0.49971E 02	0.26759E 02	0.	-0.43499E 01	-0.67998E 02	4.40	
0.57718E 02	0.14997E 02	0.	-0.11517E 02	-0.64251E 02	4.60	
0.71740E 02	0.11992E 01	0.	-0.55362E 01	-0.70750E 02	4.80	
0.77872E 02	-0.65290E 01	0.	-0.16692E 01	-0.74883E 02	5.00	
0.78163E 02	-0.21062E 02	0.	-0.12679E 01	-0.83145E 02	5.20	
0.71296E 02	-0.25715E 02	0.	-0.49249E 01	-1.04139E 02	5.40	
0.43013E 02	-0.31136E 02	0.	-0.15452E 02	-0.71849E 02	5.60	
0.65579E 02	-0.46598E 02	0.	-0.18138E 02	-0.89809E 02	5.80	
0.70274E 02	-0.49176E 02	0.	-0.16789E 02	-0.10584E 03	6.00	
-0.97309E 01	-0.44742E 02	-0.	-0.56623E 02	-0.80691E 02	6.20	
-0.39305E 02	-0.11581E 01	-0.	-0.76460E 02	-0.55953E 02	6.40	
-0.27248E 02	0.16751E 02	-0.	-0.74140E 02	-0.44646E 02	6.60	
0.17423E 02	0.17724E 02	0.	-0.85737E 02	-0.40301E 02	6.80	
0.35251E 02	0.19343E 01	0.	-0.10990E 03	-0.12163E 02	7.00	
0.78724E 02	-0.41994E 02	0.	-0.16701E 03	0.20581E 02	7.20	
0.11498E 03	-0.11228E 03	0.	-0.21202E 03	0.15703E 03	7.40	
0.10750E 03	-0.16001E 03	0.	-0.19158E 03	0.20585E 03	7.60	
0.94984E 01	-0.12751E 03	0.	-0.40619E 02	0.13691E 03	7.80	
-0.48799E 02	-0.53179E 02	-0.	0.31288E 02	0.49159E 02	8.00	
-0.11667E 03	-0.40481E 01	-0.	0.22357E 02	0.47430E 02	8.20	
-0.10933E 03	0.18149E 02	-0.	0.16183E 02	0.46711E 02	8.40	
-0.80866E 02	0.70362E 02	-0.	0.17906E 02	0.31274E 02	8.60	
-0.43073E 02	0.17246E 02	-0.	0.19476E 02	0.18848E 02	8.80	
-0.26571E 02	0.16179E 02	-0.	0.16182E 02	0.11697E 02	9.00	
-0.18701E 02	0.16149E 02	-0.	0.13020E 02	0.58116E 01	9.20	
-0.12177E 02	0.16086E 02	-0.	0.98169E 01	-0.67656E 00	9.40	
-0.44090E 01	0.15921E 02	-0.	0.46355E 01	-0.46792E 01	9.60	
0.41803E 00	0.15140E 02	0.	-0.25436E 01	-0.47057E 01	9.80	
0.46778E 01	0.36217E 01	0.	-0.10315E 02	0.21862E 02	10.00	
0.10977E 02	0.76062E-00	0.	-0.21967E 02	0.31930E 02		
0.72560E 01	0.13556E 01	0.	-0.13628E 02	0.20795E 02		
-0.17913E 01	0.40659E 01	-0.	0.12280E 02	0.10822E 02		
-0.41687E 00	0.67482E 01	-0.	0.13614E 01	0.40471E 01		
0.11137E 01	0.63819E 01	-0.	0.11410E 02	0.10121E 01		
0.24817E 01	0.59507E 01	-0.	0.91819E 01	-0.84753E-01		
0.31352E 01	0.59110E 01	-0.	0.25002E 01	0.59363E 00		
0.36236E 01	0.60362E 01	-0.	0.58288E 01	0.10946E 01		
0.38149E 01	0.61581E 01	-0.	0.59027E 01	0.15868E 01		
0.41471E 01	0.61688E 01	-0.	0.63367E 01	0.17821E 01		
0.44071E 01	0.64182E 01	-0.	0.21405E 01	-0.33232E 01		
0.58686E 01	0.30242E 01	0.	0.85201E 01	-0.33851E 01		
0.54752E 01	0.19066E 01	0.	0.61000E 01	-0.34599E 01		
0.58863E 01	-0.46629E-01	0.	0.46550E 01	-0.41189E 01		
0.56081E 01	-0.14618E 01	0.	0.19254E 01	0.16036E 01		
0.48862E 01	-0.36787E 01	0.	0.17034E 01	0.16519E 01		
0.26490E 01	-0.37856E 01	0.	-0.16000E 01	0.48919E-00		
-0.58005E-01	-0.21897E 01	0.	-0.16000E 01	0.19870E 01		
-0.20921E 01	0.	-0.	-0.16000E-00	0.	10.00	

Table XIX --- Continued

(PSI/IPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUT-OFF FREQUENCY: 0 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.50

BODY BALANCE STATION: 540 SEGMENT NUMBER 17

TWO-DIMENSIONAL STRESS						FREQUENCY	
REAL	IMAGINARY					CPS	
-0.41367E-00	0.21845E 01	0.	-0.	0.	-0.	0.15	
-0.17055E 02	0.47525E 01	0.	-0.	0.	-0.	0.20	
-0.12753E 02	0.51045E 01	0.	-0.	0.	-0.	0.25	
-0.10136E 02	0.50192E 01	0.	-0.	0.	-0.	0.30	
-0.91232E 01	0.45185E 01	0.	-0.	0.	-0.	0.35	
-0.86287E 01	0.42711E 01	0.	-0.	0.	-0.	0.40	
-0.82977E 01	0.40609E 01	0.	-0.	0.	-0.	0.45	
-0.80412E 01	0.38783E 01	0.	-0.	0.	-0.	0.50	
-0.78482E 01	0.36731E 01	0.	-0.	0.	-0.	0.55	
-0.76932E 01	0.35041E 02	0.	-0.	0.	-0.	0.60	
-0.761770E 01	0.27250E 02	0.	-0.	0.	-0.	0.65	
-0.76487E 01	0.19591E 02	-0.	-0.	-0.	-0.	0.70	
-0.76588E 02	-0.88780E 01	-0.	-0.	-0.	-0.	0.75	
-0.77325E 02	-0.10830E 02	-0.	-0.	-0.	-0.	0.80	
-0.13154E 02	-0.10660E 02	-0.	-0.	-0.	-0.	0.85	
-0.14109E 01	-0.70419E 01	-0.	-0.	-0.	-0.	0.90	
-0.17455E 01	-0.36872E 01	0.	-0.	0.	-0.	0.95	
-0.33592E 01	-0.61092E 00	0.	-0.	0.	-0.	1.00	
-0.72321E 01	0.55539E 01	0.	-0.	0.	-0.	1.05	
-0.93266E 01	0.43075E 01	0.	-0.	0.	-0.	1.10	
-0.96131E 01	0.12024E 02	0.	-0.	0.	-0.	1.15	
-0.96967E 01	0.15111E 02	0.	-0.	0.	-0.	1.20	
-0.91309E 01	0.18391E 02	0.	-0.	0.	-0.	1.25	
-0.87253E 01	0.21142E 02	0.	-0.	0.	-0.	1.30	
-0.81113E 01	0.25315E 02	0.	-0.	0.	-0.	1.35	
-0.69002E 01	0.27670E 02	0.	-0.	0.	-0.	1.40	
-0.62726E 01	0.29245E 02	0.	-0.	0.	-0.	1.45	
-0.57700E 01	0.29919E 02	0.	-0.	0.	-0.	1.50	
-0.54043E 01	0.31197E 02	0.	-0.	0.	-0.	1.55	
-0.51902E 01	0.32935E 02	0.	-0.	0.	-0.	1.60	
-0.48220E 01	0.34938E 02	0.	-0.	0.	-0.	1.65	
-0.45716E 01	0.48406E 02	0.	-0.	0.	-0.	1.70	
-0.42768E 01	0.62730E 02	0.	-0.	0.	-0.	1.75	
-0.19133E 02	0.82247E 02	-0.	-0.	-0.	-0.	1.80	
-0.11120E 02	0.65945E 02	-0.	-0.	-0.	-0.	1.85	
-0.36949E 02	0.62187E 02	-0.	-0.	-0.	-0.	1.90	
-0.68421E 02	0.62732E 02	-0.	-0.	-0.	-0.	1.95	
-0.10874E 03	0.18364E 02	-0.	-0.	-0.	-0.	2.00	
-0.19631E 03	-0.97535E 02	-0.	-0.	-0.	-0.	2.05	
-0.26661E 03	-0.22157E 03	-0.	-0.	-0.	-0.	2.10	
-0.24127E 03	-0.20703E 03	-0.	-0.	-0.	-0.	2.15	
-0.27296E 02	-0.20064E 03	-0.	-0.	-0.	-0.	2.20	
-0.18267E 02	-0.68254E 02	0.	-0.	0.	-0.	2.25	
-0.78618E 02	-0.55142E 02	0.	-0.	0.	-0.	2.30	
-0.67986E 02	-0.46449E 02	0.	-0.	0.	-0.	2.35	
-0.63341E 02	-0.27072E 02	0.	-0.	0.	-0.	2.40	
-0.65173E 02	-0.10155E 02	0.	-0.	0.	-0.	2.45	
-0.43915E 02	-0.48793E-00	0.	-0.	0.	-0.	2.50	
-0.36786E 02	0.65665E 01	0.	-0.	0.	-0.	2.55	
-0.25670E 02	0.11495E 02	0.	-0.	0.	-0.	2.60	
-0.15601E 02	0.12651E 02	0.	-0.	0.	-0.	2.65	
-0.11071E 02	0.13170E 02	0.	-0.	0.	-0.	2.70	
-0.10124E 02	0.20275E 02	0.	-0.	0.	-0.	2.75	
-0.91879E 01	0.22816E 02	0.	-0.	0.	-0.	2.80	
-0.54881E 01	0.19939E 02	0.	-0.	0.	-0.	2.85	
-0.50463E 01	0.16699E 02	-0.	-0.	-0.	-0.	2.90	
-0.97195E 01	0.13532E 02	-0.	-0.	-0.	-0.	2.95	
-0.15819E 02	0.87449E 01	-0.	-0.	-0.	-0.	3.00	
-0.25065E 02	0.88665E-01	-0.	-0.	-0.	-0.	3.05	
-0.36795E 02	-0.39881E 02	-0.	-0.	-0.	-0.	3.10	
-0.32629E 02	-0.55355E 02	-0.	-0.	-0.	-0.	3.15	
-0.68609E 02	-0.71386E 02	-0.	-0.	-0.	-0.	3.20	
-0.36502E 02	-0.81800E 02	-0.	-0.	-0.	-0.	3.25	
-0.15736E 02	-0.33591E 02	-0.	-0.	-0.	-0.	3.30	
-0.39733E 02	-0.16024E 01	0.	-0.	0.	-0.	3.35	
-0.21166E 02	0.26640E 01	0.	-0.	0.	-0.	3.40	
-0.11265E 02	0.27549E 01	0.	-0.	0.	-0.	3.45	
-0.38270E 01	0.15949E 01	-0.	-0.	-0.	-0.	3.50	
-0.14549E 01	0.22640E-00	-0.	-0.	-0.	-0.	3.55	
-0.60630E 00	0.31779E-01	-0.	-0.	-0.	-0.	3.60	
-0.61847E 00	-0.20941E-01	-0.	-0.	-0.	-0.	3.65	
-0.42890E-00	0.	-0.	-0.	-0.	-0.	3.70	

Table XIX --- Concluded

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
 ALTITUDE: 24,000 FT
 MACH NUMBER: 0.50

BODY BALANCE STATION: 820 SEGMENT NUMBER 1

INCIDENTAL AXIAL STRESS						
		REAL	IMAGINARY	FREQUENCY CPS		
-0.	-0.	-0.64532F 02	-0.37354F 01	-0.	-0.	0.10
0.	-0.	0.11113F 03	-0.27342F 02	0.	-0.	0.30
0.	0.	0.89632F 02	-0.36570F 02	0.	-0.	0.50
0.	0.	0.72251F 02	-0.40561F 02	0.	-0.	0.60
0.	0.	0.44755F 02	-0.45965F 02	0.	-0.	0.70
0.	0.	0.48275F 02	-0.52830F 02	0.	-0.	0.80
0.	0.	0.54431F 02	-0.62109F 02	0.	-0.	0.90
0.	0.	0.52477F 02	-0.74731F 02	0.	-0.	1.00
0.	0.	0.50185F 02	-0.93173F 02	0.	-0.	1.20
0.	0.	0.45633F 02	-0.16979F 03	0.	-0.	1.40
0.	0.	0.18472F 02	-0.30810F 03	0.	-0.	1.60
0.	0.	-0.16653F 03	-0.17367F 03	-0.	-0.	1.80
0.	0.	-0.46555F 03	0.18689F 03	-0.	-0.	2.00
0.	0.	-0.38233F 03	0.23427F 03	-0.	-0.	2.20
0.	0.	-0.25672F 03	0.22788F 03	-0.	-0.	2.40
0.	0.	-0.16051F 03	0.17824F 03	-0.	-0.	2.60
0.	0.	-0.59644F 02	0.13400F 03	-0.	-0.	2.80
0.	0.	-0.13927F 02	0.15121F 03	-0.	-0.	3.00
0.	0.	0.40951F 01	0.41327F 02	0.	-0.	3.20
0.	0.	0.31133F 02	0.16867F 02	0.	-0.	3.40
0.	0.	0.34133F 02	-0.29920F 01	0.	-0.	3.60
0.	0.	0.33107F 02	-0.25064F 02	0.	-0.	3.80
0.	0.	0.28835F 02	-0.35515F 02	0.	-0.	4.00
0.	0.	0.27027F 02	-0.43678F 02	0.	-0.	4.20
0.	0.	0.43397F 01	-0.48643F 02	0.	-0.	4.40
0.	0.	-0.79345F 01	-0.49504F 02	-0.	-0.	4.60
0.	0.	-0.14735F 02	-0.41674F 02	-0.	-0.	4.80
0.	0.	-0.21593F 02	-0.39922F 02	-0.	-0.	5.00
0.	0.	-0.22615F 02	-0.24639F 02	-0.	-0.	5.20
0.	0.	-0.14244F 02	-0.26219F 02	-0.	-0.	5.40
0.	0.	0.54413F 00	-0.42131F 02	-0.	-0.	5.60
0.	0.	0.46413F 01	-0.57721F 02	-0.	-0.	5.80
0.	0.	0.65531F 01	-0.73309F 02	0.	-0.	6.00
0.	0.	-0.17011F 02	-0.40101F 02	-0.	-0.	6.20
0.	0.	-0.17347F 02	-0.97217F 02	-0.	-0.	6.40
0.	0.	-0.41498F 02	-0.13161F 03	-0.	-0.	6.60
0.	0.	-0.13653F 03	-0.13753F 03	-0.	-0.	6.80
0.	0.	-0.23937F 03	-0.55756F 02	-0.	-0.	7.00
0.	0.	-0.45955F 03	0.22871F 03	-0.	-0.	7.20
0.	0.	-0.43055F 03	0.53228F 03	-0.	-0.	7.40
0.	0.	-0.56655F 03	0.70544F 03	-0.	-0.	7.60
0.	0.	-0.40297F 02	0.45755F 03	-0.	-0.	7.80
0.	0.	0.20937F 03	0.14242F 03	0.	-0.	8.00
0.	0.	0.15711F 03	0.14095F 03	0.	-0.	8.20
0.	0.	0.13352F 03	0.13074F 03	0.	-0.	8.40
0.	0.	0.14123F 03	0.75163F 02	0.	-0.	8.60
0.	0.	0.14244F 03	0.23699F 02	0.	-0.	8.80
0.	0.	0.11437F 03	-0.51825F 01	0.	-0.	9.00
0.	0.	0.94372F 02	-0.26377F 02	0.	-0.	9.20
0.	0.	0.48555F 02	-0.42644F 02	0.	-0.	9.40
0.	0.	0.45913F 02	-0.47946F 02	0.	-0.	9.60
0.	0.	0.13154F 02	-0.47551F 02	0.	-0.	9.80
0.	0.	-0.22437F 01	-0.14263F 02	-0.	-0.	10.00
0.	0.	-0.24837F 02	-0.21199F 01	-0.	-0.	10.20
0.	0.	-0.16655F 02	-0.13338F 02	-0.	-0.	10.40
0.	0.	0.62512F 01	-0.22628F 02	0.	-0.	10.60
0.	0.	0.17498F 00	0.24166F 02	0.	-0.	10.80
0.	0.	-0.11474F 02	-0.19801F 02	-0.	-0.	11.00
0.	0.	-0.25554F 02	-0.10033F 02	-0.	-0.	11.20
0.	0.	-0.49332F 02	0.35682F 02	-0.	-0.	11.40
0.	0.	-0.48519F 02	0.50366F 02	-0.	-0.	11.60
0.	0.	-0.44344F 02	0.67572F 02	-0.	-0.	11.80
0.	0.	-0.41723F 02	0.76710F 02	-0.	-0.	12.00
0.	0.	-0.19479F 02	0.27564F 02	-0.	-0.	12.20
0.	0.	0.38311F 02	0.50559F 01	0.	-0.	12.40
0.	0.	0.17174F 02	-0.81817F 01	0.	-0.	12.60
0.	0.	0.67349F 01	-0.40403F 01	0.	-0.	12.80
0.	0.	-0.20734F 01	-0.1711F 01	-0.	-0.	13.00
0.	0.	-0.41476F 01	-0.94234F 00	-0.	-0.	13.20
0.	0.	-0.42644F 01	-0.76482F 02	-0.	-0.	13.40
0.	0.	-0.41453F 01	0.13460F 01	-0.	-0.	13.60
0.	0.	-0.38200F 01	0.	-0.	-0.	13.80

APPENDIX VI
STRESS RESPONSE PARAMETERS
AND
ZERO-CROSSING RATES

Table XX. Stress Response Parameters and Zero-Crossing Rates (Analysis Condition 1)

GROSS WEIGHT: 297,000 LB
MACH NUMBER: 0.85
ALTITUDE: 24,000 FT

Location		Segment number	Axial stress		Shear stress	
Body station	Percent semispan		A (psi)	N ₀ (Zero crossings per second)	A (psi)	N ₀ (Zero crossings per second)

SCALE OF TURBULENCE: 1,000 FT
CUTOFF FREQUENCY: 10 CPS

---	27	10	421	1.02	62	1.81
---	27	14	382	1.02	152	1.25
---	40.06	8	397	1.06	111	1.32
---	40.06	107	359	1.06	106	1.30
540	---	S-17	0	0	31.17	2.64
820	---	S-1	159	1.38	0	0

SCALE OF TURBULENCE: 3,000 FT
CUTOFF FREQUENCY: 10 CPS

---	27	10	339	0.886	47.5	1.64
---	27	14	308	0.886	122	1.09
---	40.06	8	318	0.921	87.6	1.16
---	40.06	107	272	0.921	84.1	1.15
540	---	S-17	0	0	24.09	2.37
820	---	S-1	128	1.19	0	0

SCALE OF TURBULENCE: 5,000 FT
CUTOFF FREQUENCY: 10 CPS

---	27	10	293	0.863	40.7	1.62
---	27	14	266	0.863	105	1.06
---	40.06	8	274	0.903	75.4	1.14
---	40.06	107	234	0.903	72.4	1.12
540	---	S-17	0	0	20.67	2.33
820	---	S-1	111	1.16	0	0

Table XX --- Concluded

GROSS WEIGHT: 297,000 LB

MACH NUMBER: 0.85

ALTITUDE: 24,000 FT

Location		Segment number	Axial stress		Shear stress	
Body station	Percent semispan		A (psi)	N ₀ (Zero crossings per second)	A (psi)	N ₀ (Zero crossings per second)

SCALE OF TURBULENCE: 1,000

CUTOFF FREQUENCY: 15 CPS

---	27	10	421	1.02	62	1.82
---	27	14	382	1.02	152	1.25
---	40.06	8	397	1.06	111	1.33
---	40.06	107	339	1.06	106	1.31
540	---	S-17	0	0	31.17	2.64
820	---	S-1	159	1.38	0	0

SCALE OF TURBULENCE: 1,000 FT

CUTOFF FREQUENCY: 20 CPS

---	27	10	421	1.04	62	1.82
---	27	14	382	1.04	152	1.22
---	40.06	8	397	1.04	111	1.30
---	40.06	107	339	1.04	106	1.30
540	---	S-17	0	0	31.17	2.61
820	---	S-1	159	1.39	0	0

Table XXI. Stress Response Parameters and Zero-Crossing Rates (Analysis Condition 2)

GROSS WEIGHT: 268,000 LB
MACH NUMBER: 0.85
ALTITUDE: 24,000 FT

Location		Segment number	Axial stress		Shear stress	
Body station	Percent semispan		A (psi)	N ₀ (Zero crossings per second)	A (psi)	N ₀ (Zero crossings per second)

SCALE OF TURBULENCE: 1,000 FT
CUTOFF FREQUENCY: 10 CPS

---	27	10	377	1.03	71	2.21
---	27	14	342	1.03	152	1.50
---	40.06	8	342	1.03	111	1.79
---	40.06	107	293	1.03	107	1.75
540	---	S-17	0	0	43.56	3
820	---	S-1	179	2.02	0	0

SCALE OF TURBULENCE: 3,000 FT
CUTOFF FREQUENCY: 10 CPS

---	27	10	312	0.868	52.9	2.06
---	27	14	283	0.868	121	1.30
---	40.06	8	283	0.863	86.6	1.59
---	40.06	107	242	0.863	83.6	1.55
540	---	S-17	0	0	32.44	2.80
820	---	S-1	143	1.76	0	0

SCALE OF TURBULENCE: 5,000 FT
CUTOFF FREQUENCY: 10 CPS

---	27	10	270	0.846	45.1	2.03
---	27	14	245	0.846	105	1.28
---	40.06	8	245	0.841	74.3	1.56
---	40.06	107	210	0.841	71.9	1.52
540	---	S-17	0	0	27.69	2.76
820	---	S-1	123	1.73	0	0

Table XXII. Stress Response Parameters and Zero-Crossing Rates (Analysis Condition 3)

GROSS WEIGHT: 190,590 LB
MACH NUMBER: 0.85
ALTITUDE: 24,000 FT

Location		Segment number	Axial stress		Shear stress	
Body station	Percent semispan		A (psi)	N ₀ (Zero crossings per second)	A (psi)	N ₀ (Zero crossings per second)

SCALE OF TURBULENCE: 1,000 FT
CUTOFF FREQUENCY: 10 CPS

---	27	10	304	1.15	58.1	2.34
---	27	14	276	1.15	121	1.62
---	40.06	8	274	1.22	95.2	2.09
---	40.06	107	234	1.22	91.6	2.08
540	---	S-17	0	0	51.4	2.55
820	---	S-1	177	2.07	0	0

SCALE OF TURBULENCE: 3,000 FT
CUTOFF FREQUENCY: 10 CPS

---	27	10	239	1.02	41.5	2.28
---	27	14	217	1.02	92.1	1.48
---	40.06	8	215	1.09	70.3	1.97
---	40.06	107	183	1.09	68	1.95
540	---	S-17	0	0	39.2	2.32
820	---	S-1	138	1.85	0	0

SCALE OF TURBULENCE: 5,000 FT
CUTOFF FREQUENCY: 10 CPS

---	27	10	206	1	35.1	2.27
---	27	14	187	1	78.8	1.45
---	40.06	8	184	1.07	59.9	1.95
---	40.06	107	157	1.07	58	1.92
540	---	S-17	0	0	33.6	2.28
820	---	S-1	118	1.82	0	0

Table XXIII Stress Response Parameters and Zero-Crossing Rates (Analysis Condition 4)

GROSS WEIGHT: 107,260 LB
MACH NUMBER: 0.85
ALTITUDE: 24,000 FT

Location		Segment number	Axial stress		Shear stress	
Body station	Percent semispan		A (psi)	N ₀ (Zero crossings per second)	A (psi)	N ₀ (Zero crossings per second)

SCALE OF TURBULENCE: 1,000 FT
CUTOFF FREQUENCY: 10 CPS

---	27	10	177	1.39	58.1	3.14
---	27	14	161	1.39	77.9	2.89
---	40.06	8	169	1.50	63.2	2.93
---	40.06	107	145	1.50	60.5	2.91
540	---	S-17	0	0	31.25	3.46
820	---	S-1	116	2.90	0	0

SCALE OF TURBULENCE: 3,000 FT
CUTOFF FREQUENCY: 10 CPS

---	27	10	135	1.27	40.5	3.12
---	27	14	122	1.27	54.8	2.85
---	40.06	8	128	1.37	44.8	2.86
---	40.06	107	110	1.37	43.1	2.84
540	---	S-17	0	0	22.39	3.34
820	---	S-1	85.8	2.73	0	0

SCALE OF TURBULENCE: 5,000 FT
CUTOFF FREQUENCY: 10 CPS

---	27	10	115	1.25	34.2	3.12
---	27	14	105	1.25	46.3	2.85
---	40.06	8	110	1.36	38	2.85
---	40.06	107	93.8	1.36	36.5	2.82
540	---	S-17	0	0	18.99	3.33
820	---	S-1	73.1	2.70	0	0

Table XXIV. Stress Response Parameters and Zero-Crossing Rates (Analysis Condition 5)

GROSS WEIGHT: 297,000 LB

MACH NUMBER: 0.50

ALTITUDE: 24,000 FT

Location		Segment number	Axial stress		Shear stress	
Body station	Percent semispan		A (psi)	N ₀ (Zero crossings per second)	A (psi)	N ₀ (Zero crossings per second)

SCALE OF TURBULENCE: 1,000 FT

CUTOFF FREQUENCY: 10 CPS

---	27	10	226	1.08	29.5	1.53
---	27	14	205	1.08	76.7	1.21
---	40.06	8	221	1.10	56.6	1.34
---	40.06	107	189	1.10	53.3	1.33
540	---	S-17	0	0	21.1	3.08
820	---	S-1	88.1	1.87	0	0

SCALE OF TURBULENCE: 3,000 FT

CUTOFF FREQUENCY: 10 CPS

---	27	10	158	1.08	20.6	1.54
---	27	14	144	1.08	53.6	1.18
---	40.06	8	154	1.08	39.5	1.34
---	40.06	107	132	1.08	37.2	1.34
540	---	S-17	0	0	14.68	3.08
820	---	S-1	61.5	1.85	0	0

SCALE OF TURBULENCE: 5,000 FT

CUTOFF FREQUENCY: 10 CPS

---	27	10	133	1.07	17.3	1.52
---	27	14	121	1.07	45.3	1.20
---	40.06	8	130	1.10	33.3	1.34
---	40.06	107	111	1.10	31.4	1.31
540	---	S-17	0	0	12.4	3.06
820	---	S-1	59.9	1.86	0	0

APPENDIX VII INCREMENTAL LIMIT ALLOWABLE STRESSES

Table XXV. Incremental Limit Allowable Stresses

Location		Segment number	Analysis condition											
			1		2		3		4		5			
Body station	Percent semispan		Gross wt: 297,000 lb Mach number: 0.85		Gross wt: 268,000 lb Mach number: 0.85		Gross wt: 190,590 lb Mach number: 0.85		Gross wt: 107,000 lb Mach number: 0.85		Gross wt: 297,000 lb Mach number: 0.50			
			Axial stress (psi)	Shear stress (psi)	Axial stress (psi)	Shear stress (psi)	Axial stress (psi)	Shear stress (psi)	Axial stress (psi)	Shear stress (psi)	Axial stress (psi)	Shear stress (psi)		
SCALE OF TURBULENCE: 1,000 FEET														
---	27	10	24,700	3,800	24,400	4,500	29,400	5,600	33,500	10,300	23,500	3,000		
---	27	14	24,100	9,500	23,600	10,500	27,200	12,500	31,000	15,100	23,500	9,000		
---	40.06	8	24,100	6,600	23,600	7,600	27,700	10,900	32,400	11,100	22,300	5,700		
---	40.06	107	18,000	5,800	17,500	6,500	20,400	7,900	23,200	9,900	18,200	5,300		
540	---	S-17	---	4,190	---	4,190	---	4,190	---	5,635	---	4,190		
820	---	S-1	22,100	---	21,900	---	23,400	---	27,700	---	25,700	---		
SCALE OF TURBULENCE: 3,000 FEET														
---	27	10	24,800	3,500	24,500	4,100	29,600	4,900	34,300	9,000	23,500	3,000		
---	27	14	24,000	9,500	23,400	10,500	27,400	12,400	31,100	15,100	23,500	9,000		
---	40.06	8	24,000	6,700	23,600	7,300	27,800	9,600	32,300	11,300	22,300	5,200		
---	40.06	107	18,300	5,700	17,800	6,100	20,900	7,500	24,200	9,300	18,200	5,300		
540	---	S-17	---	4,190	---	4,190	---	4,190	---	5,635	---	4,190		
820	---	S-1	22,100	---	21,900	---	23,400	---	27,700	---	25,700	---		
SCALE OF TURBULENCE: 5,000 FEET														
---	27	10	24,700	3,800	24,500	4,200	29,500	5,100	34,100	9,100	23,500	3,100		
---	27	14	24,100	9,500	23,800	10,100	27,900	11,600	31,500	14,400	23,600	8,600		
---	40.06	8	24,300	5,300	23,700	7,300	28,200	9,100	32,600	10,700	22,300	5,800		
---	40.06	107	18,300	5,500	17,900	6,000	21,100	7,300	24,300	9,000	18,200	5,100		
540	---	S-17	---	4,190	---	4,190	---	4,190	---	5,635	---	4,190		
820	---	S-1	22,100	---	21,900	---	23,400	---	27,700	---	25,700	---		

**APPENDIX VIII
CORRELATION COEFFICIENTS
BETWEEN
AXIAL AND SHEAR STRESSES**

Table XXVI. Correlation Coefficients Between Axial and Shear Stresses

Location		$W_c = 10$ cps			$W_c = 15$ cps	$W_c = 20$ cps
Percent wing semispan	Segment number	L = 1,000 ft	L = 3,000 ft	L = 5,000 ft	L = 1,000 ft	L = 1,000 ft

ANALYSIS CONDITION 1

27	10	0.835	0.866	0.871	-0.835	-0.835
27	14	0.961	0.971	0.972	0.961	0.961
40.06	8	0.962	0.971	0.972	0.962	0.962
40.06	107	-0.962	-0.971	-0.972	-0.962	-0.952

ANALYSIS CONDITION 2

27	10	0.746	0.780	0.786	---	
27	14	0.941	0.956	0.958		
40.06	8	0.887	0.910	0.913		
40.06	107	-0.894	-0.916	-0.919		

ANALYSIS CONDITION 3

27	10	0.673	0.687	0.689	---	
27	14	0.922	0.935	0.937		
40.06	8	0.831	0.851	0.854		
40.06	107	-0.837	-0.859	-0.862		

ANALYSIS CONDITION 4

27	10	-0.0127	-0.0490	-0.0558	---	
27	14	0.475	0.493	0.495		
40.06	8	0.575	0.598	0.602		
40.06	107	-0.585	-0.611	-0.615		

ANALYSIS CONDITION 5

27	10	0.904	0.905	0.905	---	
27	14	0.975	0.975	0.975		
40.06	8	0.972	0.972	0.972		
40.06	107	-0.972	-0.972	-0.972		

APPENDIX IX
STRESS INFLUENCE COEFFICIENTS

(a) 27 PERCENT WING SEMISPAN, SEGMENT NUMBER 10

$$\begin{Bmatrix} \text{Skin Stress} \\ \text{Shear Stress} \end{Bmatrix} = \begin{bmatrix} 0.00197 \frac{\text{PSI}}{\text{In-Lb}} & 0 & 0 \\ 77 \times 10^{-6} \frac{\text{PSI}}{\text{In-Lb}} & 0.0228 \frac{\text{PSI}}{\text{Lb}} & 865 \times 10^{-6} \frac{\text{PSI}}{\text{In-Lb}} \end{bmatrix} \begin{Bmatrix} \text{Bending Moment} \\ \text{Shear} \\ \text{Torsion} \end{Bmatrix}$$

(b) 27 PERCENT WING SEMISPAN, SEGMENT NUMBER 14

$$\begin{Bmatrix} \text{Skin Stress} \\ \text{Shear Stress} \end{Bmatrix} = \begin{bmatrix} 0.000971 \frac{\text{PSI}}{\text{In-Lb}} & 0 & 0 \\ 188 \times 10^{-6} \frac{\text{PSI}}{\text{In-Lb}} & 0.0655 \frac{\text{PSI}}{\text{Lb}} & 865 \times 10^{-6} \frac{\text{PSI}}{\text{In-Lb}} \end{bmatrix} \begin{Bmatrix} \text{Bending Moment} \\ \text{Shear} \\ \text{Torsion} \end{Bmatrix}$$

(c) 40.06 PERCENT SEMISPAN, SEGMENT NUMBER 8

$$\begin{Bmatrix} \text{Skin Stress} \\ \text{Shear Stress} \end{Bmatrix} = \begin{bmatrix} 0.00158 \frac{\text{PSI}}{\text{In-Lb}} & 0 & 0 \\ 123 \times 10^{-6} \frac{\text{PSI}}{\text{In-Lb}} & 0.0359 \frac{\text{PSI}}{\text{Lb}} & 1370 \times 10^{-6} \frac{\text{PSI}}{\text{In-Lb}} \end{bmatrix} \begin{Bmatrix} \text{Bending Moment} \\ \text{Shear} \\ \text{Torsion} \end{Bmatrix}$$

(d) 40.06 PERCENT SEMISPAN, SEGMENT NUMBER 107

$$\begin{Bmatrix} \text{Segment Stress} \\ \text{Shear Stress} \end{Bmatrix} = \begin{bmatrix} -0.00135 \frac{\text{PSI}}{\text{In-Lb}} & 0 & 0 \\ 43.4 \times 10^{-6} \frac{\text{PSI}}{\text{In-Lb}} & 0.0525 \frac{\text{PSI}}{\text{Lb}} & 1286 \times 10^{-6} \frac{\text{PSI}}{\text{In-Lb}} \end{bmatrix} \begin{Bmatrix} \text{Bending Moment} \\ \text{Shear} \\ \text{Torsion} \end{Bmatrix}$$

APPENDIX IX --- CONCLUDED

(e) BODY BALANCE STATION 540, STRINGER S-7

$$\begin{Bmatrix} \text{Axial Stress} \\ \text{Shear Stress} \end{Bmatrix} = \begin{bmatrix} 0 & 0 \\ 0 & 0.0516 \frac{\text{PSI}}{\text{Lb}} \end{bmatrix} \begin{Bmatrix} \text{Bending Moment} \\ \text{Shear} \end{Bmatrix}$$

(f) BODY BALANCE STATION 820, STRINGER S-1

$$\begin{Bmatrix} \text{Axial Stress} \\ \text{Shear Stress} \end{Bmatrix} = \begin{bmatrix} 0.000302 \frac{\text{PSI}}{\text{In-Lb}} & 0 \\ 0 & 0 \end{bmatrix} \begin{Bmatrix} \text{Bending Moment} \\ \text{Shear} \end{Bmatrix}$$

Sign Convention

- + Segment Stress — Tension
- + Bending Moment — Tension in lower skin
- + Shear — Outboard wing sheared up relative to inboard wing
- + Torsion — Leading edge up

REFERENCES

1. D. Espey and A. Laier, External Loads Criteria, D-16809, Vol. I, The Boeing Company, April 1956
2. Military Specification, Airplane Strength and Rigidity, MIL-A-8860 (ASG), U. S. Air Force, May 1960
3. R. E. Baum and J. R. Newell, Jr., Mass Properties for Power Spectral Gust Analysis, D6-18249, The Boeing Company, September 1965
4. D. O. Neilson and E. Plunkett, Ground Vibration Test of the KC-135 Airplane, T6-1044, The Boeing Company, December 1957
5. D. R. Magee and W. W. Bingham, Ground Vibration Test of the 707-321 Airplane, T6-1588, The Boeing Company, June 1959
6. J. T. Rogers, Review of 707 Design Aeroelastic Analysis Based on Comparison with Measured Flight Loads on the KC-135 Airplane, D6-1042, The Boeing Company, September 1958
7. L. D. Richmond, A Rational Method of Obtaining Three-Dimensional Unsteady Aerodynamic Derivatives of Intersecting Airfoils in Subsonic Flow, D6-7401, The Boeing Company, April 1962
8. J. C. Houbolt, R. Steiner, and K. G. Pratt, Dynamic Response of Airplanes to Atmospheric Turbulence Including Flight Data on Input and Response, TR R-199, National Aeronautics and Space Administration, 1965
9. R. Coffman, G. Gillette, G. Houlihan, Fuselage Stress Analysis, D-16811, Vol. II, The Boeing Company, May 1957
10. A. R. Wright, Wing Stress Analysis, D6-16810, Vol. I, The Boeing Company, January 1957
11. J. R. Fuller et al., Contribution to the Development of a Power Spectral Gust Design Procedure for Civil Aircraft, FAA-ADS-54, Contract FA-WA-4768, January 1966
12. T. A. Montgomery, External and Internal Loads for C-135 Airplane, D6-7267, Vol. II, The Boeing Company, April 1961
13. A. W. Byrski, Design Loads Criteria for Growth 707-100/200 Series Airplanes, D6-3212, Vol. II, The Boeing Company, July 1959

DOCUMENT CONTROL DATA-R&D		
<i>(Security classification of title, body of abstract and indexing annotation will be entered when the overall report is classified)</i>		
1. ORIGINATING ACTIVITY (Corporate author) The Boeing Company Commercial Airplane Division Renton, Washington		2a. REPORT SECURITY CLASSIFICATION unclassified
		2b. GROUP none
3. REPORT TITLE Volume 1. KC-135 Power Spectral Vertical Gust Load Analysis <u>Detailed Analysis and Results</u>		
4. DESCRIPTIVE NOTES (Type of report and inclusive dates) Final Report July 1965 to March 1966		
5. AUTHOR(S) (Last name, first name, initial) Latz, Robert N.		
6. REPORT DATE July 1966	7. TOTAL NO. OF PAGES 121	7b. NO. OF REFS. 13
8a. CONTRACT OR GRANT NO. AF 33 (615) - 2454	8b. ORIGINATOR'S REPORT NUMBER(S) AFFDL-TR-66-57, Vol. I	
b. PROJECT NO. System No. 5 (611367 62405334)		
c. Project No. 1367		
d. Task No. 136702	9. OTHER REPORT NO. (S) (Any other numbers that may be assigned this report) D6-18252	
10. AVAILABILITY/LIMITATION NOTICES This document is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with proper approval of the Air Force Flight Dynamics Laboratory (FDTR), Wright-Patterson AFB, Ohio 45433.		
11. SUPPLEMENTARY NOTES	12. SPONSORING MILITARY ACTIVITY Air Force Flight Dynamics Laboratory, Research and Technology Division, Air Force Systems Command, Wright-Patterson AFB, Ohio	
13. ABSTRACT This report presents the results of an analysis to obtain the stress response parameters (level of stress per level of turbulence) and zero-crossing rates at two wing stations and two body stations of the KC-135 airplane where the margins of safety for gusts are minimum. Five combinations of gross weight, speed, and altitude were selected. The results of the computer analysis present the effects of changes in scale of turbulence and upper cutoff frequency on the response parameters and zero-crossing rates. Results indicate a large reduction in stress response parameter and small reduction in zero-crossing rate with increasing scale of turbulence. Variations of upper cutoff frequency above the highest modal frequency used in the analysis indicate negligible change in either stress response parameter or zero-crossing rates. The ratios of incremental limit allowable stress to stress response parameter obtained over a wide range of gross weight, speed, and scale of turbulence result in a minimum value of 53. This document (volume I) presents the analyses and specific results described above. Volume II presents response parameters, zero-crossing rates, frequency response functions, and power spectra of bending moment, shear, and torsion.		

Unclassified

14	KEY WORDS	LINK A		LINK B		LINK C	
		ROLE	WT	ROLE	WT	ROLE	WT
	Gust Loads Power Spectra Stresses Response Parameters Zero Crossings Analysis						

INSTRUCTIONS

1. ORIGINATING ACTIVITY: Enter the name and address of the contractor, subcontractor, grantee, Department of Defense activity or other organization (*corporate author*) issuing the report.

2a. REPORT SECURITY CLASSIFICATION: Enter the overall security classification of the report. Indicate whether "Restricted Data" is included. Marking is to be in accordance with appropriate security regulations.

2b. GROUP: Automatic downgrading is specified in DoD Directive 5200.10 and Armed Forces Industrial Manual. Enter the group number. Also, when applicable, show that optional markings have been used for Group 3 and Group 4 as authorized.

3. REPORT TITLE: Enter the complete report title in all capital letters. Titles in all cases should be unclassified. If a meaningful title cannot be selected without classification, show title classification in all capitals in parenthesis immediately following the title.

4. DESCRIPTIVE NOTES: If appropriate, enter the type of report, e.g., interim, progress, summary, annual, or final. Give the inclusive dates when a specific reporting period is covered.

5. AUTHOR(S): Enter the name(s) of author(s) as shown on or in the report. Enter last name, first name, middle initial. If military, show rank and branch of service. The name of the principal author is an absolute minimum requirement.

6. REPORT DATE: Enter the date of the report as day, month, year; or month, year. If more than one date appears on the report, use date of publication.

7a. TOTAL NUMBER OF PAGES: The total page count should follow normal pagination procedures, i.e., enter the number of pages containing information.

7b. NUMBER OF REFERENCES: Enter the total number of references cited in the report.

8a. CONTRACT OR GRANT NUMBER: If appropriate, enter the applicable number of the contract or grant under which the report was written.

8b, 8c, & 8d. PROJECT NUMBER: Enter the appropriate military department identification, such as project number, sub-project number, system numbers, task number, etc.

9a. ORIGINATOR'S REPORT NUMBER(S): Enter the official report number by which the document will be identified and controlled by the originating activity. This number must be unique to this report.

9b. OTHER REPORT NUMBER(S): If the report has been assigned any other report numbers (*either by the originator or by the sponsor*), also enter this number(s).

10. AVAILABILITY /LIMITATION NOTICES: Enter any limitations on further dissemination of the report, other than those imposed by security classification, using standard statements such as:

itations on further dissemination of the report, other than those imposed by security classification, using standard statements such as.

(1) "Qualified requesters may obtain copies of this report from DDC."

(2) "Foreign announcement and dissemination of this report by DDC is not authorized."

(3) "U. S. Government agencies may obtain copies of this report directly from DDC. Other qualified DDC users shall request through _____."

(4) "U. S. military agencies may obtain copies of this report directly from DDC. Other qualified users shall request through _____."

(5) "All distribution of this report is controlled. Qualified DDC users shall request through _____."

If the report has been furnished to the Office of Technical Services, Department of Commerce, for sale to the public, indicate this fact and enter the price, if known.

11. SUPPLEMENTARY NOTES: Use for additional explanatory notes.

12. SPONSORING MILITARY ACTIVITY: Enter the name of the departmental project office or laboratory sponsoring (*paying for*) the research and development. Include address.

13. ABSTRACT: Enter an abstract giving a brief and factual summary of the document indicative of the report, even though it may also appear elsewhere in the body of the technical report. If additional space is required, a continuation sheet shall be attached.

It is highly desirable that the abstract of classified reports be unclassified. Each paragraph of the abstract shall end with an indication of the military security classification of the information in the paragraph, represented as (TS), (S), (C), or (U).

There is no limitation on the length of the abstract. However, the suggested length is from 150 to 225 words.

14. KEY WORDS: Key words are technically meaningful terms or short phrases that characterize a report and may be used as index entries for cataloging the report. Key words must be selected so that no security classification is required. Identifiers, such as equipment model designation, trade name, military project code name, geographic location, may be used as key words but will be followed by an indication of technical context. The assignment of links, rules, and weights is optional.

Unclassified

SUPPLEMENTARY

INFORMATION

Errata

AD-802 114
AD 802 114
AFFDL TR-66-57
VOLUME I

KC-135
POWER SPECTRAL
VERTICAL GUST LOAD
ANALYSIS

DETAILED ANALYSIS AND RESULTS
VOLUME I

ROBERT N. LATZ
THE BOEING COMPANY

"This document is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with proper approval of the Air Force Flight Dynamics Laboratory (FDTR), Wright-Patterson AFB, Ohio 45433."